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NEWS 8 DEC 15 MEDLINE update schedule for December 2004
NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness
                alerts (SDIs) affected
NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness
                alerts (SDIs) affected
NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness
                alerts (SDIs) affected
NEWS
     12 DEC 17 CERAB reloaded; updating to resume; current-awareness
                alerts (SDIs) affected
NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN
NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED
NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and
                February 2005
                CA/CAPLUS - Russian Agency for Patents and Trademarks
NEWS 17 FEB 25
                 (ROSPATENT) added to list of core patent offices covered
NEWS 18 FEB 10
                STN Patent Forums to be held in March 2005
NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS
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NEWS
     20 FEB 28 PATDPAFULL - New display fields provide for legal status
                data from INPADOC
NEWS 21 FEB 28 BABS - Current-awareness alerts (SDIs) available
     22 FEB 28 MEDLINE/LMEDLINE reloaded
NEWS
NEWS 23 MAR 02 GBFULL: New full-text patent database on STN
     24 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS
NEWS 25 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 10 JANUARY.2005
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FILE 'HOME' ENTERED AT 13:14:48 ON 16 MAR 2005

=> file medline, uspatful, biosis, fsta, jicst, biotechds, wpids

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 1.68 1.6

FILE 'MEDLINE' ENTERED AT 13:19:26 ON 16 MAR 2005

FILE 'USPATFULL' ENTERED AT 13:19:26 ON 16 MAR 2005
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FILE 'BIOTECHDS' ENTERED AT 13:19:26 ON 16 MAR 2005 COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE 'WPIDS' ENTERED AT 13:19:26 ON 16 MAR 2005 COPYRIGHT (C) 2005 THE THOMSON CORPORATION

=> s cardiovascular disease L1 298015 CARDIOVASCULAR DISEASE

=> s l1 and treatment L2 61034 L1 AND TREATMENT

=> s LDL

L3 93918 LDL

=> sCRP

SCRP IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s CRP

L4 23399 CRP

=> s 14 and 13

L5 876 L4 AND L3

=> s 15 and 11

L6 240 L5 AND L1

=> s VLDL

L7 25858 VLDL

=> s 17 and 16

L8 34 L7 AND L6

=> s lactoferrin

L9 13291 LACTOFERRIN

=> s 18 and 19

L10 3 L8 AND L9

=> d l10 ti abs ibib tot

L10 ANSWER 1 OF 3 USPATFULL on STN

Lactoferrin in the reduction of circulating cholesterol, ТT vascular inflammation, atherosclerosis and cardiovascular

The present invention relates to methods of using lactoferrin AB (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of atherosclerosis and cardiovascular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2004:197318 USPATFULL ACCESSION NUMBER:

Lactoferrin in the reduction of circulating TITLE:

cholesterol, vascular inflammation, atherosclerosis and

cardiovascular disease

Varadhachary, Atul, Houston, TX, UNITED STATES INVENTOR(S):

> Glynn, Peter, Houston, TX, UNITED STATES Wang, Yenyun, Houston, TX, UNITED STATES Engelmayer, Jose, Houston, TX, UNITED STATES

KIND DATE NUMBER _____ US 2004152623 A1 20040805 US 2003-728275 A1 20031204 (10) PATENT INFORMATION:

APPLICATION INFO.:

NUMBER DATE -----

US 2002-430867P 20021204 (60) US 2003-498337P 20030827 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100,

HOUSTON, TX, 77010-3095

NUMBER OF CLAIMS: 34 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 5 Drawing Page(s)

LINE COUNT: 1264

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 2 OF 3 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN L10

ΤI Treating a cardiovascular disease comprises administering to a subject an effective amount of a lactoferrin composition to provide an improvement in the cardiovascular disease in the subject;

> involving vector-mediated gene transfer and expression in host cell for use in gene therapy

ΑN 2004-16843 BIOTECHDS

AΒ DERWENT ABSTRACT:

> NOVELTY - Treating a cardiovascular disease comprises administering to a subject an effective amount of a lactoferrin composition to provide an improvement in the cardiovascular disease in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of modulating atherosclerosis in a subject comprising administering to the subject an effective amount of a lactoferrin composition to modulate atherosclerosis in the subject.

BIOTECHNOLOGY - Preferred Method: In treating a

cardiovascular disease, the cardiovascular

disease is atherosclerosis. The lactoferrin composition

reduces levels of circulating total cholesterol, low-density lipoproteins (LDL), very low-density lipoproteins (VLDL), or

triglycerides in the subject. The lactoferrin composition

increases the levels of circulating high-density lipoproteins (HDL) in the subject. The lactoferrin composition reduces the levels of

vascular inflammation, circulating C-reactive protein (CRP),

proliferation of vascular smooth muscle cells, vascular spasm or vascular hyper-reactivity in the subject. The lactoferrin composition promotes endothelial integrity or healing in the subject. The

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lactoferrin composition is dispersed in a carrier. The
lactoferrin is mammalian lactoferrin. The
lactoferrin is human or bovine. The lactoferrin is
recombinant lactoferrin. The lactoferrin composition
comprises an N-terminal lactoferrin variant. The N-terminal
lactoferrin variant lacks at least the N-terminal glycine
residue. The N-terminal lactoferrin variant comprises at least
1% to at least 50% of the lactoferrin composition. The
lactoferrin composition reduces the production or activity of
pro-inflammatory cytokines. The method further comprises administering a
lactoferrin composition in combination with an anti-cholesterol
agent or an anti-inflammatory agent. The anti-cholesterol agent is
selected from cholesterol absorption inhibitors, bile acid sequestrants,
nicotinic acid, fibric acids and HMG-coA reductase inhibitors. The bile
acid sequestrants are selected from cholestyramine, colestipol and
colesevalam. The fibric acids are selected from gemfibrozil, fenofibrate
and clofibrate. The HMG-coA reductase inhibitors are selected from
lovastatin, pravastatin, simvastatin, fluvastatin, atorvastatin and
cerivastatin. In modulating atherosclerosis in a subject, the modulating
is reducing the incidence or severity of atherosclerosis in the subject.
     ACTIVITY - Cardiant; Antiarteriosclerotic. No biological data given.
     MECHANISM OF ACTION - Gene therapy; HMG-coA reductase inhibitor.
     USE - The method is useful for treating a cardiovascular
```

disease, e.g. atherosclerosis (claimed).

ADMINISTRATION - Dosage is 1 ng-20 g per day or 0.1-5 g per day. The lactoferrin composition is administered parenterally, e.g. subcutaneously, intramuscularly, intraperitoneally, intravenously, intraarterially, intramyocardially, transendocardially,

transepicardially, or intrathecally, or orally (all claimed). (38 pages)

ACCESSION NUMBER: 2004-16843 BIOTECHDS

TITLE: Treating a cardiovascular disease

comprises administering to a subject an effective amount of a

lactoferrin composition to provide an improvement in

the cardiovascular disease in the subject

involving vector-mediated gene transfer and expression in

host cell for use in gene therapy

AUTHOR: VARADHACHARY A; GLYNN P; WANG Y; ENGELMAYER J

PATENT ASSIGNEE: AGENNIX INC; VARADHACHARY A PATENT INFO: WO 2004050037 17 Jun 2004 APPLICATION INFO: WO 2003-US38540 4 Dec 2003

PRIORITY INFO: US 2003-498337 27 Aug 2003; US 2002-430867 4 Dec 2002 DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2004-460986 [43]

L10 ANSWER 3 OF 3 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ΤI Treating a cardiovascular disease comprises

administering to a subject an effective amount of a lactoferrin composition to provide an improvement in the cardiovascular

disease in the subject. 2004-460986 [43] WPIDS

WO2004050037 A UPAB: 20040709 AB

> NOVELTY - Treating a cardiovascular disease comprises administering to a subject an effective amount of a lactoferrin composition to provide an improvement in the cardiovascular disease in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of modulating atherosclerosis in a subject comprising administering to the subject an effective amount of a lactoferrin composition to modulate atherosclerosis in the subject.

ACTIVITY - Cardiant; Antiarteriosclerotic. No biological data given. MECHANISM OF ACTION - Gene therapy; HMG-coA reductase inhibitor.

USE - The method is useful for treating a cardiovascular

disease, e.g. atherosclerosis (claimed).

Dwg.0/5

ΑN

2004-460986 [43] WPIDS ACCESSION NUMBER:

DOC. NO. CPI: C2004-172138 TITLE:

Treating a cardiovascular disease

comprises administering to a subject an effective amount

of a lactoferrin composition to provide an

improvement in the cardiovascular

disease in the subject.

DERWENT CLASS:

B04 D16

INVENTOR(S): PATENT ASSIGNEE(S): ENGELMAYER, J; GLYNN, P; VARADHACHARY, A; WANG, Y (ENGE-I) ENGELMAYER J; (GLYN-I) GLYNN P; (VARA-I)

VARADHACHARY A; (WANG-I) WANG Y; (AGEN-N) AGENNIX INC

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2004050037 A2 20040617 (200443)* EN 38

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE

LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE

DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG

KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM

PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US

UZ VC VN YU ZA ZM ZW

US 2004152623 A1 20040805 (200452)

AU 2003291206 A1 20040623 (200472)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE | | |
|--------------------------------|-------------------------------------|---|----------------------------------|--|--|
| WO 2004050037 US 2004152623 | A2 Al Provisional Provisional | WO 2003-US38540 US 2002-430867P US 2003-498337P | 20031204 20021204 20030827 | | |
| AU 2003291206 | A1 | US 2003-728275 AU 2003-291206 | 20031204 20031204 | | |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| | · | |
| AU 2003291206 | Al Based on | WO 2004050037 |

PRIORITY APPLN. INFO: US 2003-498337P

20030827; US 20021204; US 20031204 2002-430867P

2003-728275

=> s cholestryramine

L11 83 CHOLESTRYRAMINE

=> s cholestipol

105 CHOLESTIPOL

=> s 111 and 112

1 L11 AND L12

=> d l13 ti abs ibib tot

L13 ANSWER 1 OF 1 USPATFULL on STN

TI Lactoferrin in the reduction of circulating cholesterol, vascular

inflammation, atherosclerosis and cardiovascular disease

AB The present invention relates to methods of using lactoferrin (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of atherosclerosis and cardiovascular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:197318 USPATFULL

TITLE:

Lactoferrin in the reduction of circulating

cholesterol, vascular inflammation, atherosclerosis and

cardiovascular disease

INVENTOR (S): Varadhachary, Atul, Houston, TX, UNITED STATES

> Glynn, Peter, Houston, TX, UNITED STATES Wang, Yenyun, Houston, TX, UNITED STATES Engelmayer, Jose, Houston, TX, UNITED STATES

NUMBER KIND DATE US 2004152623 A1 20040805 PATENT INFORMATION: APPLICATION INFO.: US 2003-728275 A1 20031204 (10)

NUMBER DATE _____

US 2002-430867P 20021204 (60) US 2003-498337P 20030827 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100,

HOUSTON, TX, 77010-3095

NUMBER OF CLAIMS: 34 EXEMPLARY CLAIM: 1

5 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1264

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s atherosclerosis

L14 138829 ATHEROSCLEROSIS

=> s l14 and lactoferrin

175 L14 AND LACTOFERRIN L15

=> s 115 and treatment

154 L15 AND TREATMENT

=> s 116 and (reduced incidence)

4 FILES SEARCHED...

4 L16 AND (REDUCED INCIDENCE)

=> d l17 ti abs ibib tot

L17 ANSWER 1 OF 4 USPATFULL on STN

Proteins, polynucleotides encoding them and methods of using the same TIDisclosed herein are nucleic acid sequences that encode novel AΒ polypeptides. Also disclosed are polypeptides encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the polypeptide, as well as derivatives, variants, mutants, or fragments of the aforementioned polypeptide, polynucleotide, or antibody. The

invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders

involving any one of these novel human nucleic acids and proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:7324 USPATFULL

TITLE: Proteins, polynucleotides encoding them and methods of

using the same

INVENTOR (S): Padigaru, Muralidhara, Branford, CT, UNITED STATES

Alsobrook, John P., II, Madison, CT, UNITED STATES Colman, Steven D., Guilford, CT, UNITED STATES Spytek, Kimberly A., New Haven, CT, UNITED STATES Boldog, Ferenc L., North Haven, CT, UNITED STATES Vernet, Corine A.M., Branford, CT, UNITED STATES

Li, Li, Branford, CT, UNITED STATES

Shenoy, Suresh G., Branford, CT, UNITED STATES Casman, Stacie J., North Haven, CT, UNITED STATES Guo, Xiaojia (Sasha), Branford, CT, UNITED STATES Edinger, Shlomit R., New Haven, CT, UNITED STATES MacDougall, John R., Hamden, CT, UNITED STATES Malyankar, Uriel M., Branford, CT, UNITED STATES Patturajan, Meera, Branford, CT, UNITED STATES Shimkets, Richard A., Guilford, CT, UNITED STATES Pena, Carol E. A., New Haven, CT, UNITED STATES Tchernev, Velizar T., Branford, CT, UNITED STATES Zerhusen, Bryan D., Branford, CT, UNITED STATES Millet, Isabelle, Milford, CT, UNITED STATES Miller, Charles E., Guilford, CT, UNITED STATES Lepley, Denise M., Branford, CT, UNITED STATES Smithson, Glennda, Guilford, CT, UNITED STATES Baumgartner, Jason C., New Haven, CT, UNITED STATES Herrmann, John L., Guilford, CT, UNITED STATES Peyman, John A., New Haven, CT, UNITED STATES Gorman, Linda, Branford, CT, UNITED STATES Mezes, Peter D., Old Lyme, CT, UNITED STATES Kekuda, Ramesh, Norwalk, CT, UNITED STATES Taupier, Raymond J., JR., East Haven, CT, UNITED STATES Gerlach, Valerie, Branford, CT, UNITED STATES Grosse, William M., Branford, CT, UNITED STATES Liu, Xiaohong, Lexington, MA, UNITED STATES Ellerman, Karen, Branford, CT, UNITED STATES Rothenberg, Mark, Clinton, CT, UNITED STATES Stone, David J., Guilford, CT, UNITED STATES Burgess, Catherine E., Wethersfield, CT, UNITED STATES

| • | | NUMBER | KIND | DATE | |
|-----------------------|------|-------------|------|-----------|------|
| PATENT INFORMATION: | | 004005557 | A1 | 20040108 | |
| APPLICATION INFO.: | US 2 | 002-51874 | A1 | 20020116 | (10) |
| | | NUMBER | DA' | ΓE | |
| PRIORITY INFORMATION: | US 2 | 001-261376P | 2001 | 0116 (60) | |
| | | 001-268595P | 2001 | : : | |
| | US 2 | 001-325306P | 2001 | 0927 (60) | |
| | US 2 | 001-262587P | 2001 | 0118 (60) | |
| | US 2 | 001-272409P | 2001 | 0228 (60) | |
| | US 2 | 001-262454P | 2001 | 0118 (60) | |
| | US 2 | 001-276777P | 2001 | 0316 (60) | |
| - | US 2 | 001-291672P | 2001 | 0517 (60) | |
| | US 2 | 001-330336P | 2001 | 1018 (60) | |
| | US 2 | 001-265530P | 2001 | 0131 (60) | |
| | US 2 | 001-345202P | 2001 | 1109 (60) | |
| DOCUMENT TYPE: | Util | ity | | | |
| | | | | | |

FILE SEGMENT: LEGAL REPRESENTATIVE:

ΤI

AB

APPLICATION
MINTZ, LEVIN, COHN, FERRIS,, GLOVSKY and POPEO, P.C.,

One Financial Center, Boston, MA, 02111

NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
LINE COUNT: 16208

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 4 USPATFULL on STN

IGF-binding protein-derived peptide or small molecule

New compositions based on IGF-binding protein sequences are provided. New tools for high-throughput research are provided. New methods for the **treatment** of human disease are provided. IGFBP-3-derived peptide or small molecule is administered to subjects having disease, thereby alleviating the symptoms of the disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:319241 USPATFULL

TITLE: IGF-binding protein-derived peptide or small molecule

INVENTOR(S): Mascarenhas, Desmond, Los Altos Hills, CA, UNITED

STATES

PATENT INFORMATION: US 2003224990 A1 20031204 APPLICATION INFO.: US 2003-383999 A1 20030307 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-264672, filed on 4 Oct 2002, PENDING Continuation-in-part of Ser. No.

US 2002-215759, filed on 9 Aug 2002, PENDING

NUMBER DATE -----

PRIORITY INFORMATION:

US 2001-323267P 20010918 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: Nicholas S. Buffinger, Morrison & Foerster LLP, 755

Page Mill Road, Palo Alto, CA, 94304-1018

NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 2168

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 4 USPATFULL on STN

TI IGF-binding protein-derived peptide or small molecule

AB New compositions based on IGF-binding protein sequences are provided. New tools for high-throughput research are provided. New methods for the

treatment of human disease are provided. IGFBP-3-derived peptide or small molecule is administered to subjects having disease, thereby

alleviating the symptoms of the disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:231631 USPATFULL

TITLE: INVENTOR(S): IGF-binding protein-derived peptide or small molecule

Mascarenhas, Desmond, Los Altos Hills, CA, UNITED

STATES

NUMBER KIND DATE -----

PATENT INFORMATION: US 2003161829 A1 20030828 APPLICATION INFO.: US 2002-264672 A1 20021004 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-215759, filed

on 9 Aug 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION:

DATE US 2001-323267P 20010918 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: Nicholas S. Buffinger, Morrison & Foerster LLP, 755

Page Mill Road, Palo Alto, CA, 94304-1018

NUMBER OF CLAIMS:

30

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

16 Drawing Page(s)

LINE COUNT:

2061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 4 OF 4 USPATFULL on STN

Blood cell deficiency treatment method TI

AΒ The invention relates to the use of compounds to treat a number of conditions, such as thrombocytopenia, neutropenia or the delayed effects of radiation therapy. Compounds that can be used in the invention include methyl-2,3,4-trihydroxy-1-0-(7,17-dioxoandrost-5-ene-3B-yl)-

 β -D-glucopyranosiduronate, 16α , 3α -dihydroxy- 5α -

androstan-17-one or 3,7,16,17-tetrahydroxyandrost-5-ene,

3,7,16,17-tetrahydroxyandrost-4-ene,3,7,16,17-tetrahydroxyandrost-1-ene or 3,7,16,17-tetrahydroxyandrostane that can be used in the

treatment method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:120747 USPATFULL

TITLE: INVENTOR(S): Blood cell deficiency treatment method Ahlem, Clarence N., San Diego, CA, UNITED STATES Reading, Christopher, San Diego, CA, UNITED STATES Frincke, James, San Diego, CA, UNITED STATES

Stickney, Dwight, Granite Bay, CA, UNITED STATES Lardy, Henry A., Madison, WI, UNITED STATES Marwah, Padma, Middleton, WI, UNITED STATES Marwah, Ashok, Middleton, WI, UNITED STATES

Prendergast, Patrick T., Straffan, IRELAND

NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 2003083231 A1 20030501 A1 20020301 (10) US 2002-87929

Continuation-in-part of Ser. No. US 2000-675470, filed on 28 Sep 2000, PENDING Continuation-in-part of Ser. No. US 2001-820483, filed on 29 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2000-535675, filed on 23 Mar 2000, PENDING Continuation-in-part of Ser. No. US 1999-449004, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449184, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449042, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-461026, filed on 15 Dec 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-586673, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-586672, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser.

No. US 1999-414905, filed on 8 Oct 1999, ABANDONED

NUMBER DATE -----

PRIORITY INFORMATION:

US 1999-161453P 19991025 (60) US 2001-272624P 20010301 (60) US 2001-323016P 20010911 (60) US 2001-340045P 20011130 (60) US 2001-328738P 20011011 (60) US 2001-338015P 20011108 (60) US 2001-343523P 20011220 (60) US 1999-126056P 19991019 (60) US 1999-124087P 19990311 (60) US 1998-109923P 19981124 (60) US 1998-109924P 19981124 (60) US 1998-110127P 19981127 (60) US 1998-112206P 19981215 (60) 19990727 (60) US 1999-145823P 19990603 (60) US 1999-137745P US 1999-140028P 19990616 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL,

SUITE 400, SAN DIEGO, CA, 92121

NUMBER OF CLAIMS: 45 EXEMPLARY CLAIM: LINE COUNT: 19428

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s cardiovascular disease and lactoferrin 88 CARDIOVASCULAR DISEASE AND LACTOFERRIN L18

=> s 118 and treatment

72 L18 AND TREATMENT L19

=> s 119 and (reduced incidence)

L20 3 L19 AND (REDUCED INCIDENCE)

=> d 120 ti abs ibib ott

The following are valid formats:

The default display format is STD.

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ABS ---- AB
ALL ----- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD,
            RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL,
            DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL,
             INCLM, INCLS, NCL, NCLM, NCLS, IC, ICM, ICS,
            EXF, ARTU
ALLG ----- ALL plus PAGE.DRAW
BIB ----- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD, RLI,
            PRAI, DT, FS, EXNAM, LREP, CLMN, ECL, DRWN, LN.CNT
BIB.EX ---- BIB for original and latest publication
BIBG ----- BIB plus PAGE.DRAW
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CAS ----- OS, CC, SX, ST, IT
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DALL ----- ALL, delimited for post-processing
FP ----- PI, TI, IN, INA, PA, PAA, PAT, PTERM, DCD, AI, RLI,
             PRAI, IC, ICM, ICS, INCL, INCLM, INCLS, NCL,
            NCLM, NCLS, EXF, REP, REN, ARTU, EXNAM, LREP,
            CLMN, DRWN, AB
FP.EX ----- FP for original and latest publication
FPALL ----- PI, TI, IN, INA, PA, PAA, PAT, PETRM, DCD, AI,
            RLI, PRAI, IC, ICM, ICS, INCL, INCLM, INCLS, NCL, NCLM,
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             PARN, SUMM, DRWD, DETD, CLM
FPBIB ----- PI, TI, IN, INA, PA, PAA, PAT, PTERM, DCD, AI,
             RLI, PRAI, REP, REN, EXNAM, LREP, CLM, CLMN, DRWN
FHITSTR ---- HIT RN, its text modification, its CA index name, and
             its structure diagram
FPG ----- FP plus PAGE.DRAW
GI ----- PN and page image numbers
HIT ----- All fields containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ---- HIT RN, its text modification, its CA index name, and
             its structure diagram
IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IALLG ----- IALL plus PAGE.DRAW
IBIB ----- BIB, indented with text labels
IBIB.EX ---- IBIB for original and latest publication
IBIBG ----- IBIB plus PAGE.DRAW
IMAX ----- MAX, indented with text labels
IMAX.EX ---- IMAX for original and latest publication
IND ----- INCL, INCLM, INCLS, NCL, NCLM, NCLS, IC, ICM, ICS,
             EXF, ARTU, OS, CC, SX, ST, IT
ISTD ----- STD, indented with text labels
KWIC ----- All hit terms plus 20 words on either side
MAX ----- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD,
             RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL,
             DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL,
             INCLM, INCLS, NCL, NCLM, NCLS, IC, ICM, ICS,
             EXF, ARTU OS, CC, SX, ST, IT
MAX.EX ---- MAX for original and latest publication
OCC ----- List of display fields containing hit terms
SBIB ----- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, RLI, PRAI,
             DT, FS, LN.CNT
SCAN ----- AN, TI, NCL, NCLM, NCLS, IC, ICM, ICS (random display
             without answer number. SCAN must be entered on the
             same line as DISPLAY, e.g., D SCAN)
STD ----- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, RLI, PRAI,
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DT, FS, LN.CNT, INCL, INCLM, INCLS, NCL, NCLM, NCLS,

IC, ICM, ICS, EXF (STD is the default)

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STD.EX ---- STD for original and latest publication
TRIAL ----- AN, TI, INCL, INCLM, INCLS, NCL, NCLM, NCLS, IC,
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     FILE 'MEDLINE, USPATFULL, BIOSIS, FSTA, JICST-EPLUS, BIOTECHDS, WPIDS'
     ENTERED AT 13:19:26 ON 16 MAR 2005
        298015 S CARDIOVASCULAR DISEASE
L1
         61034 S L1 AND TREATMENT
L2
         93918 S LDL
L3
L4
         23399 S CRP
L5
           876 S L4 AND L3
           240 S L5 AND L1
1.6
L7
         25858 S VLDL
L8
           34 S L7 AND L6
         13291 S LACTOFERRIN
L9
            3 S L8 AND L9
L10
           . 83 S CHOLESTRYRAMINE
L11
           105 S CHOLESTIPOL
L12
L13
             1 S L11 AND L12
L14
        138829 S ATHEROSCLEROSIS
L15
           175 S L14 AND LACTOFERRIN
L16
           154 S L15 AND TREATMENT
             4 S L16 AND (REDUCED INCIDENCE)
L17
L18
            88 S CARDIOVASCULAR DISEASE AND LACTOFERRIN
L19
            72 S L18 AND TREATMENT
             3 S L19 AND (REDUCED INCIDENCE)
L20
=> d 120 ti abs ibib tot
   ANSWER 1 OF 3 USPATFULL on STN
       IGF-binding protein-derived peptide or small molecule
TI
AB
      New compositions based on IGF-binding protein sequences are provided.
      New tools for high-throughput research are provided. New methods for the
      treatment of human disease are provided. IGFBP-3-derived peptide
      or small molecule is administered to subjects having disease, thereby
      alleviating the symptoms of the disease.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:
                       2003:319241 USPATFULL
                       IGF-binding protein-derived peptide or small molecule
TITLE:
INVENTOR(S):
                       Mascarenhas, Desmond, Los Altos Hills, CA, UNITED
                       STATES
                                       KIND DATE
                            NUMBER
                       ______
                      US 2003224990 A1 20031204
US 2003-383999 A1 20030307
PATENT INFORMATION:
                                               20030307 (10)
APPLICATION INFO.:
                       Continuation-in-part of Ser. No. US 2002-264672, filed
RELATED APPLN. INFO.:
                       on 4 Oct 2002, PENDING Continuation-in-part of Ser. No.
                       US 2002-215759, filed on 9 Aug 2002, PENDING
                              NUMBER
                                          DATE
PRIORITY INFORMATION:
                       US 2001-323267P 20010918 (60)
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       APPLICATION
                       Nicholas S. Buffinger, Morrison & Foerster LLP, 755
LEGAL REPRESENTATIVE:
```

Page Mill Road, Palo Alto, CA, 94304-1018

NUMBER OF DRAWINGS: 24 Drawing Page(s) LINE COUNT: 2168

34

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

L20 ANSWER 2 OF 3 USPATFULL on STN

ТT

IGF-binding protein-derived peptide or small molecule

New compositions based on IGF-binding protein sequences are provided. AΒ New tools for high-throughput research are provided. New methods for the treatment of human disease are provided. IGFBP-3-derived peptide or small molecule is administered to subjects having disease, thereby alleviating the symptoms of the disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:231631 USPATFULL

IGF-binding protein-derived peptide or small molecule TITLE:

Mascarenhas, Desmond, Los Altos Hills, CA, UNITED INVENTOR(S):

STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2003161829 A1 20030828 APPLICATION INFO.: US 2002-264672 A1 20021004 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-215759, filed

on 9 Aug 2002, PENDING

NUMBER DATE -----

US 2001-323267P 20010918 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: Nicholas S. Buffinger, Morrison & Foerster LLP, 755

Page Mill Road, Palo Alto, CA, 94304-1018

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 16 Drawing Page(s)

LINE COUNT: 2061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 3 OF 3 USPATFULL on STN

TI Blood cell deficiency treatment method

AB The invention relates to the use of compounds to treat a number of conditions, such as thrombocytopenia, neutropenia or the delayed effects of radiation therapy. Compounds that can be used in the invention include methyl-2,3,4-trihydroxy-1-O-(7,17-dioxoandrost-5-ene-3β-yl)- β -D-glucopyranosiduronate, 16α , 3α -dihydroxy- 5α androstan-17-one or 3,7,16,17-tetrahydroxyandrost-5-ene, 3,7,16,17-tetrahydroxyandrost-4-ene,3,7,16,17-tetrahydroxyandrost-1-ene

or 3,7,16,17-tetrahydroxyandrostane that can be used in the

treatment method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:120747 USPATFULL

Blood cell deficiency treatment method TITLE:

INVENTOR(S): Ahlem, Clarence N., San Diego, CA, UNITED STATES

Reading, Christopher, San Diego, CA, UNITED STATES Frincke, James, San Diego, CA, UNITED STATES

Stickney, Dwight, Granite Bay, CA, UNITED STATES Lardy, Henry A., Madison, WI, UNITED STATES Marwah, Padma, Middleton, WI, UNITED STATES Marwah, Ashok, Middleton, WI, UNITED STATES

Prendergast, Patrick T., Straffan, IRELAND

KIND DATE US 2003083231 A1 20030501 US 2002-87929 A1 20020301 (10) PATENT INFORMATION: APPLICATION INFO.:

Continuation-in-part of Ser. No. US 2000-675470, filed RELATED APPLN. INFO.:

NUMBER

on 28 Sep 2000, PENDING Continuation-in-part of Ser. No. US 2001-820483, filed on 29 Mar 2001, PENDING

Continuation-in-part of Ser. No. US 2000-535675, filed

on 23 Mar 2000, PENDING Continuation-in-part of Ser. No. US 1999-449004, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449184, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449042, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-461026, filed on 15 Dec 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-586673, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-586672, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-414905, filed on 8 Oct 1999, ABANDONED

| | NUMBER | DATE |
|-----------------------|--------------------|-----------------------|
| PRIORITY INFORMATION: | US 1999-161453P | 19991025 (60) |
| INIONIII INIONEMIION. | US 2001-272624P | 20010301 (60) |
| | US 2001-323016P | 20010911 (60) |
| | US 2001-340045P | 20011130 (60) |
| | US 2001-328738P | • |
| | US 2001-338015P | |
| | US 2001-343523P | · · |
| | US 1999-126056P | |
| | US 1999-124087P | • • |
| | US 1998-109923P | |
| | US 1998-109924P | • • • |
| | US 1998-110127P | 19981127 (60) |
| | US 1998-112206P | • • • • |
| | US 1999-145823P | |
| | US 1999-137745P | • • |
| | US 1999-140028P | 19990616 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | HOLLIS-EDEN PHARMA | CEUTICALS, INC., 4435 |

EASTGATE MALL,

SUITE 400, SAN DIEGO, CA, 92121

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 19428

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Hit List

Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

Search Results - Record(s) 1 through 5 of 5 returned.

1. Document ID: US 6140552 A

L1: Entry 1 of 5 File: USPT Oct 31, 2000

US-PAT-NO: 6140552

DOCUMENT-IDENTIFIER: US 6140552 A

TITLE: Production of recombinant polypeptides by bovine species and transgenic methods

DATE-ISSUED: October 31, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Deboer; Herman A. Roelofarendsyeen NLStrijker; Rein Oegstgeest NL Heyneker; Herbert L. Hillsborough CA Platenburg; Gerard Voorschoten NLLee; Sang He Leiden NLPieper; Frank Utrecht NLKrimpenfort; Paul J. A. Heemstede NL

US-CL-CURRENT: 800/15; 800/3, 800/4, 800/7, 800/8

| SFull Title Citation Front Review Classification Date Reference Classification Date | Draw Desc∵lma |
|---|---|
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2. Document ID: US 6066725 A

L1: Entry 2 of 5 File: USPT May 23, 2000

US-PAT-NO: 6066725

DOCUMENT-IDENTIFIER: US 6066725 A

TITLE: Production of recombinant polypeptides by bovine species and transgenic methods

DATE-ISSUED: May 23, 2000

INVENTOR-INFORMATION:

NAME CITY ZIP CODE STATE COUNTRY DeBoer; Herman A. Roelofarendsveen Strijker; Rein Oegstgeest NLHeyneker; Herbert L. Hillsborough CA Platenburg; Gerard Voorschoten NLLee; Sang He Leiden NLPieper; Frank Utrecht NLKrimpenfort; Paul J. A. Heemstede NL

US-CL-CURRENT: $\underline{536}/\underline{23.5}$; $\underline{435}/\underline{69.1}$, $\underline{536}/\underline{23.1}$

3. Document ID: US 6013857 A

L1: Entry 3 of 5 File: USPT Jan 11, 2000

US-PAT-NO: 6013857

DOCUMENT-IDENTIFIER: US 6013857 A

TITLE: Transgenic bovines and milk from transgenic bovines

DATE-ISSUED: January 11, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Deboer; Herman A. Roelofarendsveen NLStrijker; Rein Oegstgeest NLHeyneker; Herbert L. Hillsborough CA Voorschoten Platenburg; Gerard NL Lee; Sang He Leiden NLPieper; Frank Utrecht NLKrimpenfort; Paul J. A. Heemstede NL

US-CL-CURRENT: 800/15; 424/535, 426/556, 426/580, 426/587, 426/588, 435/3, 435/69.1,

800/13, 800/4, 800/5

| Full : Title : Citation Front Review Classification Date Reference | |
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| | |

4. Document ID: US 5741957 A

L1: Entry 4 of 5 File: USPT Apr 21, 1998

US-PAT-NO: 5741957

DOCUMENT-IDENTIFIER: US 5741957 A

TITLE: Transgenic bovine

DATE-ISSUED: April 21, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Deboer; Herman A. Roelofarendsveen NL Strijker; Rein Oegstgeest NLHeyneker; Herbert L. Hillsborough CA Platenburg; Gerard Voorschoten NLLee; Sang He Leiden NL Pieper; Frank Utrecht NL Krimpenfort; Paul J. A. Heemstede NL

US-CL-CURRENT: 800/7; 435/69.1, 800/15, 800/25

| Full Title Citation | Front Review | | Claims KMC | Draw Desc Ima |
|---------------------|--------------|--|------------|---------------|
| | | | | |

L1: Entry 5 of 5

File: USPT

May 27, 1997

US-PAT-NO: 5633076

DOCUMENT-IDENTIFIER: US 5633076 A

TITLE: Method of producing a transgenic bovine or transgenic bovine embryo

DATE-ISSUED: May 27, 1997

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-------------------------|------------------|-------|----------|---------|
| DeBoer; Herman A. | Roelofarendsveen | | | NL |
| Strijker; Rein | Oegstgeest | | | NL |
| Heyneker; Herbert L. | Hillsborough | CA | | |
| Platenburg; Gerard | Voorschoten | | | NL |
| Lee; Sang H. | Leiden | | | NL |
| Pieper; Frank | Utrecht | | | NL |
| Krimpenfort; Paul J. A. | Heemstede | | | NL |
| | | | | |

US-CL-CURRENT: 800/25

| Full Title Citation Front Review Classification Date R | eference Claims : KVMC: Draw. Desc. |
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| | 4 |
| | Fwd Refs Bkwd Refs Generate OACS |
| Terms | Documents |
| | |

Display Format: CIT Change Format

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Hit List

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Search Results - Record(s) 1 through 8 of 8 returned.

1. Document ID: US 4491616 A

L6: Entry 1 of 8 File: USPT Jan 1, 1985

US-PAT-NO: 4491616

DOCUMENT-IDENTIFIER: US 4491616 A

TITLE: Resinous polymer sheet material having surface decorative effects of contrasting

gloss and method of making the same

DATE-ISSUED: January 1, 1985

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Schmidle; Claude J. Trenton NJ Varadhachary; Seevaram N. Newtown PA

US-CL-CURRENT: 428/158; 427/272, 427/280, 427/494, 427/510, 428/159, 428/201, 428/212,

428/308.4, 428/913

Full Title Citation Front Review Classification Date Reference Claims KWC Draw Desc Ima

2. Document ID: US 4389514 A

L6: Entry 2 of 8 File: USPT Jun 21, 1983

US-PAT-NO: 4389514

DOCUMENT-IDENTIFIER: US 4389514 A

TITLE: Accelerated polymerization of acrylic monomers initiated by dialkyl and diaralkyl

peroxide free radical generators in the presence of tin accelerators

DATE-ISSUED: June 21, 1983

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Schmidle; Claude J. Trenton NJ <u>Varadhachary</u>; Seevaram N. Newtown PA

US-CL-CURRENT: <u>525/364</u>; <u>525/370</u>, <u>526/184</u>, <u>526/192</u>

Full Title Citation Front Review Classification Date Reference Communication Date Reference Communication Claims KWIC Draw Description

3. Document ID: US 4361626 A

L6: Entry 3 of 8 File: USPT Nov 30, 1982

US-PAT-NO: 4361626

DOCUMENT-IDENTIFIER: US 4361626 A

TITLE: Methods for bonding dissimilar synthetic polymeric materials and the products involved in and resulting from such methods

DATE-ISSUED: November 30, 1982

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Boba; Joseph Fort Lee NJ

<u>Varadhachary</u>; Seevaram N. Newtown PA

Pogozelski; Vincent F. Newtown PA

 $\text{US-CL-CURRENT: } \underline{428/420}; \ \underline{427/302}, \ \underline{427/333}, \ \underline{427/372.2}, \ \underline{427/520}, \ \underline{428/423.3}, \ \underline{428/424.4},$

<u>428/424.6</u>, <u>428/424.8</u>, <u>428/522</u>, <u>522/126</u>, <u>522/95</u>, <u>522/96</u>

| Full Title Citation Front Review Classification | Date Reference | Claims KWC Draw Desc Imag |
|---|----------------|-------------------------------|
| 4. Document ID: US 4337296 A | | |
| L6: Entry 4 of 8 | File: USPT | Jun 29, 1982 |

US-PAT-NO: 4337296

DOCUMENT-IDENTIFIER: US 4337296 A

TITLE: Methods for bonding dissimilar synthetic polymeric materials and the products

involved in and resulting from such methods

DATE-ISSUED: June 29, 1982

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

<u>Varadhachary</u>; Seevaram N. Newtown PA

US-CL-CURRENT: 428/420; 427/302, 427/333, 427/372.2, 427/517, 427/520, 428/423.3,

<u>428/424.4</u>, <u>428/424.6</u>, <u>428/424.8</u>, <u>428/522</u>, <u>522/111</u>, <u>522/95</u>, <u>522/96</u>

| Full | ा॥ | e Citation | Front | Review | Classification | Date | Reference | | | Claims | KWC | Draw Desc | : Ima |
|--------|-------|------------|--------|--------|----------------|-------------|-----------|-------|---|---|-------------|-----------|--------------|
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| | 5. | Docume | nt ID: | US 43 | 33987 A | | | | | | | | |

File: USPT

Jun 8, 1982

US-PAT-NO: 4333987

L6: Entry 5 of 8

DOCUMENT-IDENTIFIER: US 4333987 A

TITLE: Methods for bonding dissimilar synthetic polymeric materials and the products

involved in and resulting from such methods

DATE-ISSUED: June 8, 1982

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Kwart; Harold Newark DE 19711
Varadhachary; Seevaram N. Newtown PA 18940

US-CL-CURRENT: 428/419; 427/372.2, 427/520, 428/420, 428/424.6, 522/20, 522/66, 522/96,

522/97

Title Citation Front Review Classification Date Reference Citation Claims KMC Draw Desc Ima

6. Document ID: US 4273819 A

L6: Entry 6 of 8

File: USPT

ZIP CODE

Jun 16, 1981

COUNTRY

Jun 29, 1976

US-PAT-NO: 4273819

DOCUMENT-IDENTIFIER: US 4273819 A

TITLE: Differential gloss products and methods of making the same

DATE-ISSUED: June 16, 1981

INVENTOR-INFORMATION:

NAME CITY STATE

Schmidle; Claude J. Trenton NJ

Varadhachary; Seevaram N. Newtown PA

US-CL-CURRENT: 428/159; 156/219, 156/220, 156/240, 156/246, 156/247, 156/277, 156/79,

264/52, 264/DIG.82, 427/264, 427/373, 428/207, 428/304.4

Full: Title: Citation Front Review Classification Date Reference Claims KMC Draw Describe:

7. Document ID: US 3966857 A

L6: Entry 7 of 8 File: USPT

US-PAT-NO: 3966857

DOCUMENT-IDENTIFIER: US 3966857 A

TITLE: Lubrication of extruded materials

DATE-ISSUED: June 29, 1976

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Charlton; Ralph W. Newfoundland NJ NJ

Varadhachary; Seevaram N. North Plainfield

US-CL-CURRENT: <u>264/75</u>; <u>264/176.1</u>, <u>264/211</u>, <u>264/245</u>, <u>264/349</u>

Full Title Citation Front Review Classification Date Reference Claims KMC Draw Desc. Ima

8. Document ID: US 3787280 A

L6: Entry 8 of 8 File: USPT Jan 22, 1974

US-PAT-NO: 3787280

DOCUMENT-IDENTIFIER: US 3787280 A

TITLE: RESINOUS PRODUCT HAVING SHARP COLOR DEFINITIONS THEREIN

DATE-ISSUED: January 22, 1974

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Conger; Robert P.

Park Ridge

NJ

<u>Varadhachary</u>; Seevaram N. North Plainfield

NJ

US-CL-CURRENT: <u>525/82</u>; <u>156/62.2</u>, <u>264/245</u>, <u>264/73</u>, <u>525/305</u>

| Full | itle Citation | Front | Review C | lassiticatio | n Date | Referen | ce | | | Claims | KWIC | Draw De | sc ima |
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| | Terms | | | | | | Do | cument | S | | | | |
| | varadhacha | ry.in. | | | - | | | | | | | 8 | |

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Search Results - Record(s) 1 through 10 of 12 returned.

1. Document ID: US 6743908 B2

L11: Entry 1 of 12 File: USPT Jun 1, 2004

US-PAT-NO: 6743908

DOCUMENT-IDENTIFIER: US 6743908 B2

TITLE: Single-chain antigen-binding proteins capable of glycosylation, production and

uses thereof

DATE-ISSUED: June 1, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Filpula; David Piscataway NJ

Wang; Maoliang E. Brunswick NJ

Shorr; Robert Edison NJ

Whitlow; Marc El Sobrante CA

Lee; Lihsyng S. Princeton Junction NJ

US-CL-CURRENT: $\underline{536}/\underline{23.53}$; $\underline{435}/\underline{320.1}$, $\underline{435}/\underline{69.1}$, $\underline{435}/\underline{69.6}$

Full: Title Citation Front Review Classification Date Reference Claims KMC Draw Desc. Ima

2. Document ID: US 6743896 B2

L11: Entry 2 of 12 File: USPT Jun 1, 2004

US-PAT-NO: 6743896

DOCUMENT-IDENTIFIER: US 6743896 B2

TITLE: Single-chain antigen-binding proteins capable of glycosylation, production and

uses thereof

DATE-ISSUED: June 1, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Filpula; David Piscataway NJ
Wang; Maoliang E. Brunswick NJ
Shorr; Robert Edison NJ
Whitlow; Marc El Sobrante CA
Lee; Lihsyng S. Princeton Junction NJ

US-CL-CURRENT: <u>530/387.3</u>; <u>435/188</u>, <u>530/391.1</u>, <u>530/391.7</u>

| Full Title Citation Front Review | Classification Date Reference | Claims | KMC Draw Desc Ima |
|----------------------------------|-------------------------------|--------|-----------------------|
| | | | • |

3. Document ID: US 6323322 B1

L11: Entry 3 of 12 File: USPT Nov 27, 2001

US-PAT-NO: 6323322

DOCUMENT-IDENTIFIER: US 6323322 B1

TITLE: Single-chain antiqen-binding proteins capable of glycosylation, production and

uses thereof

DATE-ISSUED: November 27, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Filpula; David Piscataway NJ

Wang; Maoliang E. Brunswick NJ

Shorr; Robert Edison NJ

Whitlow; Marc El Sobrante CA

Lee; Lihsyng S. Princeton Junction NJ

US-CL-CURRENT: <u>530/387.3</u>; <u>530/391.3</u>

| Full Titl | e Citation Front Review Classification | Date Reference | Claims KMC Draw Desc Ima |
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| | | *************************************** | *************************************** |
| 1 4. | Document ID: US 6197319 B1 | į | , |

File: USPT

Mar 6, 2001

US-PAT-NO: 6197319

L11: Entry 4 of 12

DOCUMENT-IDENTIFIER: US 6197319 B1

TITLE: Cosmetic compositions containing polysaccharide/protein complexes

DATE-ISSUED: March 6, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Wang;Tian XiangEdisonNJDiGirolamo;Debra Marsha VerdonHolmdelNJRuss;Julio GansWestfieldNJ

US-CL-CURRENT: <u>424/401</u>; <u>424/59</u>, <u>424/63</u>, <u>424/70.1</u>, <u>424/70.13</u>, <u>424/70.14</u>, <u>424/70.19</u>, <u>424/70.27</u>, <u>424/70.28</u>, <u>424/74</u>, <u>514/844</u>, <u>514/845</u>, <u>514/846</u>, <u>514/847</u>

| Full® Title Citation Front Review Classification D | ate Reference | Claims KMC Draw Desco Ima |
|--|---------------|---------------------------|
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| | | |
| 5. Document ID: US 6184371 B1 | | |
| L11: Entry 5 of 12 | File: USPT | Feb 6, 2001 |

US-PAT-NO: 6184371

DOCUMENT-IDENTIFIER: US 6184371 B1

TITLE: Lactoferrin receptor genes of Moraxella

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Loosmore; Sheena M. Aurora CA Du; Run-Pan Thornhill CA Wang; Quijun Thornhill CA Willowdale CA Yang; Yan-Ping Klein; Michel H. Willowdale CA

US-CL-CURRENT: $\underline{536}/\underline{23.7}$; $\underline{424}/\underline{200.1}$, $\underline{424}/\underline{251.1}$, $\underline{435}/\underline{252.3}$, $\underline{435}/\underline{320.1}$, $\underline{435}/\underline{69.1}$, $\underline{435}/\underline{69.1}$, $\underline{435}/\underline{69.3}$, $\underline{435}/\underline{69.7}$, $\underline{536}/\underline{23.1}$, $\underline{536}/\underline{24.3}$, $\underline{536}/\underline{24.32}$

| Full Title Citation Front Review | Classification Date | e Reference | Claims | KWAC | Dravu Desc | lma |
|----------------------------------|---------------------|-------------|--------|------|------------|-----|
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6. Document ID: US 6171586 B1

L11: Entry 6 of 12

File: USPT

Jan 9, 2001

Jan 9, 2001

US-PAT-NO: 6171586

DOCUMENT-IDENTIFIER: US 6171586 B1

TITLE: Antibody formulation

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

CITY ZIP CODE COUNTRY NAME STATE Lam; Xanthe M. San Francisco CA Oeswein; James Q. Moss Beach CA Ongpipattanakul; Boonsri Bangkok THShahrokh; Zahra San Francisco CA Wang; Sharon X. San Mateo CA Weissburg; Robert P. Greenville DE Wong; Rita L. San Mateo CA

US-CL-CURRENT: 424/130.1; 424/141.1, 424/152.1, 424/154.1, 424/173.1, 530/388.75

| SECTION FOR IN | Citation Front Review Classification Date Reference | ma: |
|---------------------------------|---|--------|
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| 7. | Document ID: US 6171581 B1 | |

File: USPT

US-PAT-NO: 6171581

L11: Entry 7 of 12

DOCUMENT-IDENTIFIER: US 6171581 B1

TITLE: Water and oil emulsion solid antiperspirant/deodorant compositions

DATE-ISSUED: January 9, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Joshi; Vijay Kumar Livingston NJ

Shalotsky; Charles George Chatham NJ
Wang; Tian Xiang Edison NJ

US-CL-CURRENT: 424/65; 424/400, 424/401, 424/DIG.5, 514/937, 514/944

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | Claims | KWIC | Draw Desc | Ima

8. Document ID: US 6042815 A

L11: Entry 8 of 12 File: USPT Mar 28, 2000

US-PAT-NO: 6042815

DOCUMENT-IDENTIFIER: US 6042815 A

TITLE: Water and oil emulsion solid cosmetic composition

DATE-ISSUED: March 28, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Kellner; David Martin Hollis NY Russ; Julio Gans Westfield NJ Sandewicz; Ida Marie Spotswood NJ Shandler; Robin Felice Commack NY Edison Wang; Tian Xiang NJ

 $\text{US-CL-CURRENT: } \underline{424/63}; \ \underline{424/400}, \ \underline{424/401}, \ \underline{424/59}, \ \underline{424/64}, \ \underline{424/65}, \ \underline{514/844}, \ \underline{514/937},$

514/944

| Full / Title Citation Front Review | Classification Date | Reference | Claims | KMMC Draw Desc Ima |
|--|---------------------|-----------|--------|--------------------|
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9. Document ID: US 5977337 A

L11: Entry 9 of 12 File: USPT Nov 2, 1999

US-PAT-NO: 5977337

DOCUMENT-IDENTIFIER: US 5977337 A

TITLE: Lactoferrin receptor genes of Moraxella

DATE-ISSUED: November 2, 1999

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Loosmore; Sheena M. CA Aurora Du; Run-Pan Thornhill CA Wang; Quijun Thornhill CA Yang; Yan-Ping Willowdale CA Klein; Michel H. Willowdale CA

US-CL-CURRENT: <u>536/23.7</u>; <u>424/256.1</u>, <u>435/69.1</u>, <u>435/69.3</u>, <u>435/69.4</u>, <u>530/350</u>, <u>536/23.1</u>,

<u>536/24.3</u>, <u>536/24.32</u>

| Full Title Citation | Front Review Classification | Date Reference C | laims KWMC Draw Desc Ima |
|---------------------|-----------------------------|------------------|--------------------------|
| | | | |

10. Document ID: US 5837247 A

L11: Entry 10 of 12 File: USPT Nov 17, 1998

US-PAT-NO: 5837247

DOCUMENT-IDENTIFIER: US 5837247 A

TITLE: Chemotactic agents for t-cells

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---------------------|-----------|-------|----------|---------|
| Oppenhelm; Joost J. | Bethesda | MD | | |
| Michiel; Dennis | Funkstown | MD | | |
| Chertov; Oleg | Frederick | MD | | |
| Taub; Dennis D. | Thurmont | MD | | |
| Xu; Luoling | London | | | CA |
| Wang; Ji Ming | Frederick | MD | | |
| Murphy; William J. | Frederick | MD | | |

US-CL-CURRENT: <u>424/185.1</u>; <u>424/198.1</u>, <u>514/12</u>, <u>530/324</u>

| ≥FUII : | itle: Citation Front Review Classification Date R | eference Claims o | KMC Draw Desc Ima |
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| | Terms | Documents | |
| | L8 and lactoferrin | | 12 |

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Search Results - Record(s) 1 through 3 of 3 returned.

1. Document ID: US D481926 S

L9: Entry 1 of 3 File: USPT Nov 11, 2003

US-PAT-NO: D481926

DOCUMENT-IDENTIFIER: US D481926 S

TITLE: Plate with adjustable mounts for telephones, tools, appliances and the like

DATE-ISSUED: November 11, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Engelmayer; Juda S. New York NY 10002

US-CL-CURRENT: D08/354

| Full Title Citation Front Review Classification | lma |
|---|-----|
| | |
| | |

2. Document ID: US 6018313 A

L9: Entry 2 of 3 File: USPT Jan 25, 2000

US-PAT-NO: 6018313

DOCUMENT-IDENTIFIER: US 6018313 A

** See image for <u>Certificate of Correction</u> **

TITLE: System for determining the location of mobile objects

DATE-ISSUED: January 25, 2000

INVENTOR-INFORMATION:

CITY ZIP CODE NAME STATE COUNTRY Engelmayer; Wolfgang Bad Honnef DE Lindstrot; Walter Wachtberg DE Raven; Paul Graftschaft DΕ Sandmann; Stefan Bonn DΕ Schoemakers; Guenter Troisdorf DE

US-CL-CURRENT: 342/357.02; 701/215

| Full Title Citation | Front Review Classification | Date Reference | Claims KMC | Draw Desc Ima |
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3. Document ID: US 4785970 A

L9: Entry 3 of 3 File: USPT Nov 22, 1988

US-PAT-NO: 4785970

DOCUMENT-IDENTIFIER: US 4785970 A

TITLE: Tissue pack

DATE-ISSUED: November 22, 1988

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Engelmayer; Gerhard

Baden

AT

US-CL-CURRENT: <u>221/47</u>; <u>221/63</u>

| :《Full》: Title Citation Front Review Class | ification Date Reference | laims KMMC Draw Desc. Ime |
|--|--------------------------|-------------------------------|
| Clear Generate Collection | Print Fwd Refs Bkwd Refs | Generate OACS |
| Terms | Documents | |
| engelmayer.in. | | 3 |

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SINCE FILE TOTAL

FULL ESTIMATED COST

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=> s lactoferrin and (reduce circulating levels of cholesterol?)
9 FILES SEARCHED...

L1 1 LACTOFERRIN AND (REDUCE CIRCULATING LEVELS OF CHOLESTEROL?)

=> d l1 ti abs ibib tot

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Lactoferrin in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and cardiovascular disease

 ${\tt AB}$ The invention discloses methods for using lactoferrin to

reduce circulating levels of
cholesterol and vascular inflammation in order to treat, prevent

or reduce the incidence of atherosclerosis and cardiovascular disease.

ACCESSION NUMBER:

2004:490705 HCAPLUS 141:33800

DOCUMENT NUMBER: TITLE:

Lactoferrin in the reduction of circulating

cholesterol, vascular inflammation, atherosclerosis

and cardiovascular disease

INVENTOR(S): Varadhachary, Atul; Glynn, Peter; Wang, Yenyun;

Engelmayer, Jose

PATENT ASSIGNEE(S): Agennix Incorporated, USA

SOURCE: PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | TENT | NO. | | | KIN | D : | DATE | | i | APPL | I CAT | ION I | . O <i>l</i> . | | D | ATE | | |
|---------|-------|------|------|-----|------------|-----|------|------|-----|------|-------|-------|----------------|-----|------|-------|-----|----|
| | 2004 | | | | | | 2004 | | | WO 2 | 003-1 | US38! | 540 | | 2 | 0031 | 204 | |
| WC | 2004 | 0500 | 37 | | A 3 | ; | 2004 | 0812 | | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
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| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | |
| | | BY, | KG, | ΚZ, | MD, | RU, | ΤJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | |
| | | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | |
| | | TR, | ΒF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| บร | 2004 | 1526 | 23 | | A1 | | 2004 | 0805 | 1 | US 2 | 003- | 7282 | 75 | | 20 | 0031 | 204 | |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | 1 | US 2 | 002- | 4308 | 67P | | P 20 | 00212 | 204 | |
| | | | | | | | | | 1 | US 2 | 003- | 4983 | 37P | | P 20 | 00308 | 327 | |

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=> s lactoferrin composition adj2 administration
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0 LACTOFERRIN COMPOSITION ADJ2 ADMINISTRATION

=> s lactoferrin composition

3 18 LACTOFERRIN COMPOSITION

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L3 ANSWER 1 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Treating cancer, such as melanoma, lung hepatocarcinoma, retinoblastoma, astrocytoma, glioblastoma and leukemia, by administering a cancer immunotherapy and a lactoferrin composition.

AN 2005-111859 [12] WPIDS

AB US2005019342 A UPAB: 20050218

NOVELTY - Treating cancer comprising administering a cancer immunotherapy and an adjuvant that is a **lactoferrin composition** administered to provide an improvement in the cancer in the subject, is new

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of enhancing the immune system in a subject suffering from cancer or susceptible to cancer, comprising administering to the subject a cancer immunotherapy and an adjuvant that is a lactoferrin composition.

ACTIVITY - Cytostatic.

BALB/Cys mice were challenged subcutaneously in the middle of the left flank with 0.2 ml of a single-cell suspension containing 1x105 Her-2/neu+Transplantable carcinoma (TUBO) cells. Oral lactoferrin or placebo was administered two days before TUBO injection and for 3 weeks. Tumors were measured twice a week for the duration of the experiment. The results showed that mice treated with oral LF displayed a significant tumor inhibition, whereas no activity was observed in mice treated with placebo or left untreated.

MECHANISM OF ACTION - Vaccine.

USE - The methods and compositions of the present invention are useful for diagnosing, preventing, staging and/or treating cancer and tumor disorders, including melanoma, non-small cell lung, small cell lung, lung hepatocarcinoma, retinoblastoma, astrocytoma, glioblastoma, leukemia,

neuroblastoma, squamous cell, head, neck, gum, tongue, breast, pancreatic, prostate, renal, bone, testicular, ovarian, mesothelioma, sarcoma, cervical, gastrointestinal, lymphoma, brain, colon and bladder, preferably hematopoietic neoplasm such as acute myelogenous leukemia, acute lymphoblastic leukemia, myelodysplastic syndrome, chronic myelomonocytic leukemia, juvenile myelomonocyte leukemia, multiple myeloma and chronic lymphocytic leukemia.

Dwg.0/4

ACCESSION NUMBER: 2005-111859 [12] WPIDS

DOC. NO. CPI: C2005-037401

Treating cancer, such as melanoma, lung hepatocarcinoma, TITLE:

retinoblastoma, astrocytoma, glioblastoma and leukemia,

by administering a cancer immunotherapy and a

lactoferrin composition.

DERWENT CLASS: B04 D16

PERICLE, F; VARADHACHARY, A INVENTOR(S):

PATENT ASSIGNEE(S): (AGEN-N) AGENNIX INC

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG US 2005019342 A1 20050127 (200512)* 22

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|-------------------------------|--|----------------------------------|
| US 2005019342 | Al Provisional Provisional | US 2003-476318P US 2003-498236P US 2004-862213 | 20030606 20030827 20040607 |

PRIORITY APPLN. INFO: US 2004-862213 20040607; US

2003-476318P 20030606; US 2003-498236P 20030827

L3 ANSWER 2 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TIThermally stable lactoferrin composition for use in food/beverage products, feeds and pharmaceuticals, comprises lactoferrin

blended with a stabilizer.

2005-025090 [03] WPIDS AN JP2004352669 A UPAB: 20050112 AB

NOVELTY - A thermally stable lactoferrin composition

contains lactoferrin blended with a stabilizer.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for food/beverage product, feed and pharmaceutical, which contain the new composition.

ACTIVITY - Antiinflammatory; Immunostimulant. No biological data is given.

MECHANISM OF ACTION - Antioxidant.

USE - In food/beverage products, feeds and pharmaceuticals (claimed).

ADVANTAGE - The lactoferrin composition has

excellent thermal stability at 90 deg. C or more and is effectively utilized in food/beverage product, feed and pharmaceutical.

ACCESSION NUMBER: 2005-025090 [03] WPIDS

DOC. NO. CPI: C2005-008585

TITLE: Thermally stable lactoferrin

composition for use in food/beverage products,

feeds and pharmaceuticals, comprises lactoferrin blended

with a stabilizer.

DERWENT CLASS: A96 B04 D13

PATENT ASSIGNEE(S): (SNOW) SNOW BRAND MILK PROD CO LTD

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE PG WEEK LΑ

APPLICATION DETAILS:

AΒ

| PATENT NO | KIND . | APPLICATION | DATE |
|---------------|--------|----------------|----------|
| | | . | |
| JP 2004352669 | A | JP 2003-153317 | 20030529 |

PRIORITY APPLN. INFO: JP 2003-153317 20030529

ANSWER 3 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN L3

Use of a lactoferrin composition in the treatment of TT

diabetes mellitus and for modulating symptoms of diabetes mellitus e.g. obesity, hyperglycemia and high blood pressure.

2004-834158 [82] WPIDS AN

WO2004103285 A UPAB: 20041223

NOVELTY - Modulating and treating diabetes mellitus, and reducing blood glucose in a subject suffering from diabetes mellitus, comprises administering a lactoferrin composition.

ACTIVITY - Antidiabetic; Anorectic; Hypotensive. Recombinant Human Lactoferrin (RhLF) (650 mg/kg) (A) and placebo (rhLF diluent buffer pH 7.0) (B) were administered orally once daily for 15 consecutive days to groups of 4 non-insulin dependent diabetic mellitus (NIDDM) male mice. The NIDDM mice had serum glucose of -560 mg/dl. All animals were allowed for free access to normal laboratory chow and water. Blood samples were withdrawn from the orbital sinus immediately before dosing on day 1 and 90 minutes after the first administration on day 15. The animals were fasted for 3 hours prior to sampling. Four animals per cohort were studied. After 15 days, the serum glucose levels for (A)/control was found to be about 460/above 575 mg/dl. After 15 days, oral administration of (A) resulted in a 19.0% reduction in serum glucose as compared to the control composition.

MECHANISM OF ACTION - None given.

USE - The method is used:

- (i) for modulation of symptoms of diabetes mellitus;
- (ii) in the treatment of diabetes mellitus e.g. non-insulin dependent diabetes mellitus and insulin dependent diabetes mellitus;
- (iii) for reducing blood glucose in a subject suffering from diabetes mellitus; and
- (iv) for modulating blood insulin in a subject suffering from diabetes mellitus.

The symptoms include obesity, hyperglycemia and increased or decreased insulin levels and high blood pressure (claimed).

ADVANTAGE - The compound:

- (i) modulates the level of insulin and blood glucose;
- (ii) increases the level of insulin;
- (iii) decreases the level of blood glucose; and
- (iv) reduces blood pressure and total body weight.

The composition modulates blood insulin and effectively treats diabetes mellitus.

Dwq.0/4

ACCESSION NUMBER: 2004-834158 [82] WPIDS

DOC. NO. CPI: C2004-289685

TITLE: Use of a lactoferrin composition in

> the treatment of diabetes mellitus and for modulating symptoms of diabetes mellitus e.g. obesity, hyperglycemia

and high blood pressure.

DERWENT CLASS: B04

INVENTOR(S): ENGELMAYER, J; VARADHACHARY, A

PATENT ASSIGNEE(S): (ENGE-I) ENGELMAYER J; (VARA-I) VARADHACHARY A; (AGEN-N)

AGENNIX INC

COUNTRY COUNT: 108

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG WO 2004103285 A2 20041202 (200482) * EN 32

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG

US UZ VC VN YU ZA ZM ZW US 2005004006 A1 20050106 (200504)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|--------------------------------|----------------------|--|----------------------------------|
| WO 2004103285 US 2005004006 | A2 Al Provisional | WO 2004-US14985 US 2003-470549P US 2004-844865 | 20040513 20030514 20040513 |

PRIORITY APPLN. INFO: US 2003-470549P 20030514; US 2004-844865 20040513

L3 ANSWER 4 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN Treating subject suffering from pain, involves administering

lactoferrin composition, to provide improvement in pain
in subjects.

AN 2004-488007 [46] WPIDS

AB WO2004054608 A UPAB: 20040720

NOVELTY - Treating (M1) a subject suffering from pain, involves administering to the subject a ${f lactoferrin\ composition}$

, to provide an improvement in pain in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for modulating acute pain or chronic pain in a subject, involves administering lactoferrin composition to the subject to provide an improvement in acute pain or chronic pain in the subject.

ACTIVITY - Analgesic.

The ability of recombinant human lactoferrin (rhLF) to reduce heat-induced pain in tail flick test in mice was done as follows. Mice received 1000 mg/kg rhLF or placebo orally 60 minutes prior to test (N = 5 per group). The tail flick test measured the time (max 15 seconds) required to elicit the radiation heat-induced tail-flick response in mice. Result showed that oral lactoferrin treatment significantly reduced pain in mice.

MECHANISM OF ACTION - Reduces production or activity of pro-inflammatory cytokines; Enhances production or activity of cytokines (claimed).

 \mbox{USE} - (M1) is useful for treating a subject suffering from pain (acute or chronic pain) (claimed).

DESCRIPTION OF DRAWING(S) - The figure is a graph showing reduction in heat-induced pain measured by tail flick test in mice.

Dwg.1/2

ACCESSION NUMBER: 2004-488007 [46] WPIDS

DOC. NO. CPI: C2004-181880

TITLE: Treating subject suffering from pain, involves

administering lactoferrin composition

, to provide improvement in pain in subjects.

DERWENT CLASS: B04 D16

INVENTOR(S): PETRAK, K; VARADHACHARY, A

PATENT ASSIGNEE(S): (PETR-I) PETRAK K; (VARA-I) VARADHACHARY A; (AGEN-N)

AGENNIX INC

COUNTRY COUNT: 107

PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK | LΑ | PG |
|-----------|-----------|------|----|----|
| | | | | |

WO 2004054608 A2 20040701 (200446) * EN 30.

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE

DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US

UZ VC VN YU ZA ZM ZW

US 2004151784 A1 20040805 (200452) AU 2003293500 A1 20040709 (200474)

APPLICATION DETAILS:

| PATI | ENT NO | KIN | D | A1 | PPLICATION | DATE |
|------|------------|------|-------------|----|--------------|----------|
| | 2004054608 | A2 | | | 2003-US39358 | 20031211 |
| US 2 | 2004151784 | . A1 | Provisional | | 2002-432937P | 20021212 |
| | | | Provisional | US | 2003-498248P | 20030827 |
| | | | | US | 2003-733621 | 20031211 |
| AU 2 | 2003293500 | A1 | | AU | 2003-293500 | 20031211 |

FILING DETAILS:

| P | ATENT NO | KIND | PATENT NO |
|----|--------------|-------------|---------------|
| Αl | J 2003293500 | Al Based on | WO 2004054608 |

PRIORITY APPLN. INFO: US 2003-498248P

US 2003-498248P 20030827; US 2002-432937P 20021212; US 2003-733621 20031211

L3 ANSWER 5 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Treating tissue or organ (e.g., kidney, heart, liver, lung or pancreas) transplant rejection in recipient involves administering a lactoferrin composition to the recipient to attenuate

tissue or organ transplant rejection.

AN 2004-468695 [44] WPIDS

AB W02004052305 A UPAB: 20040712

NOVELTY - Treating a tissue or organ transplant rejection in a recipient involves administering to the recipient, a **lactoferrin** composition to attenuate the tissue or organ transplant rejection.

ACTIVITY - Immunosuppressive.

MECHANISM OF ACTION - Reducer of allogenic immune responses in recipient; Regulator of T cell responses; Stimulator of interleukin-18 or MIP-3- alpha in the gastrointestinal tract; Regulator of activity of B and T lymphocytes, antigen-presenting cells, natural killer cells, macrophages and granulocytes; Regulator of production or activity of pro-inflammatory cytokines (all claimed). Heterotopic heart transplantation in 8-10 weeks old rats (BUF, donor to WF, recipient) was performed using standard microsurgical technique of end-to-side anastomoses to recipient aorta and vena cava. Graft survival was defined as the last day of transabdominally palpable cardiac contractions. Recipients were treated with either placebo or recombinant human lactoferrin (rhLF) (625 mg/Kg) for 14 days starting seven days prior to the transplant. The results showed that lactoferrin alone significantly extended cardiac allograft survival.

USE - For treating tissue (bone marrow or peripheral stem cells) or organ (kidney, heart, lung, liver, or pancreas) transplant rejection in the recipient (claimed).

ADVANTAGE - The method induces permanent allograft or xenograft acceptance and reducing the incidence of graft-versus-host-disease involved in bone marrow or peripheral stem cells transplantation. Dwg.0/3

ACCESSION NUMBER:

2004-468695 [44] WPIDS

DOC. NO. CPI:

C2004-175661

TITLE:

Treating tissue or organ (e.g., kidney, heart, liver, lung or pancreas) transplant rejection in recipient

involves administering a lactoferrin

composition to the recipient to attenuate tissue

or organ transplant rejection.

DERWENT CLASS:

B04 D16

INVENTOR(S): PER

PERICLE, F; VARADHACHARY, A

PATENT ASSIGNEE(S): (PERI-I) PERICLE F; (VARA-I) VARADHACHARY A; (AGEN-N)

107

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE LA PG WEEK ______

WO 2004052305 A2 20040624 (200444) * EN 38

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE

LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG

KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM

PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US

UZ VC VN YU ZA ZM ZW

US 2004176276 A1 20040909 (200459)

AU 2003296447 Al 20040630 (200472)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|--------------------------------|-------------------------------------|---|----------------------------------|
| WO 2004052305 US 2004176276 | A2 A1 Provisional Provisional | WO 2003-US39265 US 2002-432113P US 2003-498338P | 20031210 20021210 20030827 |
| AU 2003296447 | A1 | US 2003-732429 AU 2003-296447 | 20031210 20031210 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|----------------|-------------|---------------|
| | | |
| AII 2003296447 | Al Based on | WO 2004052305 |

PRIORITY APPLN. INFO: US 2003-498338P

20030827; US 2002-432113P 20021210; US 2003-732429 20031210

- L3ANSWER 6 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
- Treating bacteremia, involves administering lactoferrin composition orally to subject to provide improvement in bacteremia of subject.
- ΑN 2004-468687 [44] WPIDS
- WO2004052281 A UPAB: 20040712 AB

NOVELTY - Treating (M1) bacteremia, involves administering lactoferrin composition orally to a subject to provide an improvement in the bacteremia of the subject.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) treating bacteremia or sepsis, involves supplementing the mucosal immune system in a subject by administering lactoferrin composition through an oral route;
- (2) enhancing (M2) a mucosal immune response in the gastrointestinal tract in a subject, involves administering lactoferrin composition orally to the subject;
- (3) decreasing mortality of a subject having bacteremia, involves administering lactoferrin composition orally to the subject to attenuate the bacteremia to decrease mortality of the subject;
- (4) treating (M3) a septic condition in a subject, involves administering lactoferrin composition orally to the
- subject to provide an improvement in the septic condition of the subject;
- (5) decreasing (M4) mortality of a subject having sepsis, involves administering lactoferrin composition orally to the subject to attenuate sepsis to decrease mortality of the subject; and
- (6) decreasing (M5) mortality of a subject having acute lung injury (ALI) or acute respiratory distress syndrome (ARDS), involves administering lactoferrin composition orally to the subject to attenuate ALI or ARDS to decrease mortality of the subject.

ACTIVITY - Antibacterial; Immunosuppressive; Respiratory-Gen.; Antiinflammatory.

In vivo analysis of recombinant lactoferrin in murine lipopolysaccharide (LPS) model of sepsis, was carried out as follows. Groups of mice were used for the study. Animals received different doses of Escherichia coli LPS (30, 20, 15 and 10 ng/mouse) and vehicle (saline, 0.2 ml/mouse) immediately after pre-treatment with D(+)- galactosamine (20 mq/mouse). Mortality was recorded every 12 hours over a 3-day period. The LPS (20-30 ng/mouse) resulted in 100% mortality and 15 ng/mouse resulted in 50% mortality. Vehicle and test substance comprising recombinant human lactoferrin (rhLF) were administered intravenously to groups of 8 male mice weighing 18-20 g, 16 minutes before and 10 minutes after challenge with LPS plus galactosamine. The result indicated a reduction in mortality induced by LPS by 38%.

MECHANISM OF ACTION - Enhancer of mucosal immune response; Stimulator of IL-18; Stimulator of immune cell production; Reduces production or activity of inflammatory cytokines (claimed).

USE - (M1) is useful for treating bacteremia in a subject, where the improvement includes attenuating sepsis, septic shock and organ failure. The lactoferrin composition of (M1) is useful for treating sepsis and for decreasing mortality a subject having ALI or ARDS (claimed).

The lactoferrin composition of (M1) is useful for treating a subject suspected of or having bacteremia, sepsis or septic shock caused by Gram-negative bacteria such as Escherichia, Shigella and Salmonella, Gram-positive bacteria such as Staphylococcus aureus and Bacillus sp. or other infectious agents. The lactoferrin composition of (M1) is useful for treating or preventing the consequences of bacterially induced systemic inflammatory response syndrome, and for treating or preventing endotoxemia.

ADVANTAGE - (M1) enables improvement in the bacteremia of the subject, where the improvement includes attenuating sepsis, septic shock or organ failure (claimed), decreasing days of hospitalization, decreasing or eliminating intensive care such as intensive care unit, or decreasing or eliminating the use of supportive care such as a mechanical ventilator. The lactoferrin composition of (M1) is easily administered in a variety of dosage forms to result in an improvement or

remediation of the symptoms. DESCRIPTION OF DRAWING(S) - The figure is a graph showing the

reduction of mortality and key cytokines in sepsis. Dwg.2/2

ACCESSION NUMBER: 2004-468687 [44] WPIDS

C2004-175653 DOC. NO. CPI:

Treating bacteremia, involves administering TITLE:

lactoferrin composition orally to

subject to provide improvement in bacteremia of subject.

DERWENT CLASS: B04

PETRAK, K; VARADHACHARY, A INVENTOR(S):

PATENT ASSIGNEE(S): (PETR-I) PETRAK K; (VARA-I) VARADHACHARY A; (AGEN-N)

AGENNIX INC

COUNTRY COUNT: 107

PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK L | LA PG |
|---------------|-------------|---------------|----------------------------------|
| WO 2004052281 | 72 20040624 | (200444)* FN | 44 |
| | | | ES FI FR GB GH GM GR HU IE IT KE |
| LS LU MC | MW MZ NL OA | PT RO SD SE S | SI SK SL SZ TR TZ UG ZM ZW |
| W: AE AG AL | AM AT AU AZ | BA BB BG BR B | BW BY BZ CA CH CN CO CR CU CZ DE |
| DK DM DZ | EC EE EG ES | FI GB GD GE G | GH GM HR HU ID IL IN IS JP KE KG |
| KP KR KZ | LC LK LR LS | LT LU LV MA M | MD MG MK MN MW MX MZ NI NO NZ OM |
| PG PH PL | PT RO RU SC | SD SE SG SK S | SL SY TJ TM TN TR TT TZ UA UG US |
| UZ VC VN | YU ZA ZM ZW | | |
| US 2004152624 | A1 20040805 | (200452) | |
| AU 2003298906 | A1 20040630 | (200472) | |

APPLICATION DETAILS:

PATENT NO KIND APPLICATION

| WO 2004052281 | A2 | WO 2003-US38621 | 20031205 |
|---------------|----------------|-----------------|----------|
| US 2004152624 | Al Provisional | US 2002-431393P | 20021206 |
| | Provisional | US 2003-498327P | 20030827 |
| • | | US 2003-728521 | 20031205 |
| AU 2003298906 | A1 | AU 2003-298906 | 20031205 |

FILING DETAILS:

PRIORITY APPLN. INFO: US 2003-498327P

US 2003-498327P 20030827; US 2002-431393P 20021206; US 2003-728521 20031205

L3 ANSWER 7 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Treating a cardiovascular disease comprises administering to a subject an effective amount of a lactoferrin composition to

provide an improvement in the cardiovascular disease in the subject.

AN 2004-460986 [43] WPIDS

AB WO2004050037 A UPAB: 20040709

NOVELTY - Treating a cardiovascular disease comprises administering to a subject an effective amount of a ${\bf lactoferrin}$ composition

to provide an improvement in the cardiovascular disease in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of modulating atherosclerosis in a subject comprising administering to the subject an effective amount of a **lactoferrin composition** to modulate atherosclerosis in the subject.

ACTIVITY - Cardiant; Antiarteriosclerotic. No biological data given.
MECHANISM OF ACTION - Gene therapy; HMG-coA reductase inhibitor.
USE - The method is useful for treating a cardiovascular disease,
e.g. atherosclerosis (claimed).

Dwq.0/5

ACCESSION NUMBER: 2004-460986 [43] WPIDS

DOC. NO. CPI:

C2004-172138

TITLE:

Treating a cardiovascular disease comprises administering

to a subject an effective amount of a lactoferrin

composition to provide an improvement in the

cardiovascular disease in the subject.

DERWENT CLASS:

B04 D16

INVENTOR(S):
PATENT ASSIGNEE(S):

ENGELMAYER, J; GLYNN, P; VARADHACHARY, A; WANG, Y (ENGE-I) ENGELMAYER J; (GLYN-I) GLYNN P; (VARA-I)

VARADHACHARY A; (WANG-I) WANG Y; (AGEN-N) AGENNIX INC

COUNTRY COUNT:

107

PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK LA | A PG |
|---------------|-------------|------------------|---------------------------------|
| WO 2004050037 | A2 20040617 | 7 (200443)* EN | 38 |
| RW: AT BE BO | BW CH CY CZ | Z DE DK EA EE ES | S FI FR GB GH GM GR HU IE IT KE |
| LS LU MO | MW MZ NL OA | A PT RO SD SE SI | I SK SL SZ TR TZ UG ZM ZW |
| W: AE AG AI | AM AT AU AZ | Z BA BB BG BR BW | W BY BZ CA CH CN CO CR CU CZ DE |
| DK DM D2 | EC EE EG ES | FI GB GD GE GH | H GM HR HU ID IL IN IS JP KE KG |
| KP KR K2 | LC LK LR LS | S LT LU LV MA MD | D MG MK MN MW MX MZ NI NO NZ OM |
| PG PH PI | PT RO RU SC | C SD SE SG SK SL | L SY TJ TM TN TR TT TZ UA UG US |
| UZ VC VI | YU ZA ZM ZW | 1 | |
| US 2004152623 | A1 20040805 | 5 (200452) | |
| AU 2003291206 | A1 20040623 | 3 (200472) | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|--------------------------------|-------------------------------------|---|--|
| WO 2004050037 US 2004152623 | A2 A1 Provisional Provisional | WO 2003-US38540 US 2002-430867P US 2003-498337P US 2003-728275 | 20031204 20021204 20030827 20031204 |

AU 2003291206 A1 AU 2003-291206 20031204

FILING DETAILS:

PATENT NO KIND PATENT NO _______ AU 2003291206 A1 Based on WO 2004050037

PRIORITY APPLN. INFO: US 2003-498337P

20030827; US

2002-430867P 20021204; US 2003-728275

20031204

ANSWER 8 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN L3

Treatment of hyperproliferative disease, e.g. cancer, rheumatoid ΤI arthritis, inflammatory bowel disease, or leiomyomas, involves supplementing systemic or local immune system by increasing lactoferrin.

ΑN 2004-071004 [07] WPIDS

CR 2004-035048 [03]

AΒ WO2003094952 A UPAB: 20040702

> NOVELTY - Treatment of hyperproliferative disease involves supplementing a systemic or local immune system by increasing a lactoferrin at the site of the hyperproliferative disease.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) enhancing a local immune response in the vicinity of a tumor following the step of administering intratumorally the lactoferrin composition (C1); and
- (b) treatment of hyperproliferative disease involving administering (C1) in combination with chemotherapy, biotherapy, immunotherapy, surgery or radiotherapy.

ACTIVITY - Cytostatic; Antiarthritic; Antirheumatic; Antiinflammatory; Osteopathic; Gastrointestinal-Gen.; Vasotropic; Antiarteriosclerotic; Antipsoriatic; Immunomodulator; Dermatological; Immunosuppressive.

MECHANISM OF ACTION - Tumor cell growth inhibitor; Interleukin-18 or GM-CSF production stimulator. The tumor cell growth inhibitory efficacy of recombinant human lactoferrin (rhLF) was tested on human squamous cell carcinoma (O12). The cells were injected into the right flank of athymic nude mice and rhLF (test) was administered orally at a dosage of 20 mg/dose twice a day for five days starting 11 days after inoculation with tumor cells. Control animals were treated with only the vehicle. The efficacy of the treatment was evaluated by measuring the solid tumor size during and at the end of the test. The result showed that the oral treatment with rhLF significantly reduced the tumor growth by 80% compared to the control.

USE - For treating hyperproliferative disease, e.g. cancer including neoplasm (e.g. melanoma, non-small cell lung, small cell lung, lung hepatocarcinoma, retinoblastoma, astrocytoma, gliobastoma, leukemia, neuroblastoma, squamous cell, head, neck, gum, tongue, breast, pancreatic, prostate, renal, bone, testicular, ovarian, mesothelioma, sarcoma, cervical, gastrointestinal, lymphoma, brain, colon and bladder); rheumatoid arthritis; inflammatory bowel disease; osteoarthritis; leiomyomas; adenomas; lipomas; hemangiomas; fibromas; vascular occlusion; restenosis; atherosclerosis; pre-neoplastic lesions; carcinoma in situ; oral hairy leukoplakia and psoriasis (claimed). Also useful for treating neurofibromatosis, Waginer's granulomatosis, Kawasaki's disease, lupus erythematosus and midline granuloma.

ADVANTAGE - The lactoferrin stimulates the production of interleukin-18 or GM-CSF in the site of injection, which stimulates the production, maturation or activity of immune cells (e.g. T lymphocytes selected from CD4+, CD8+ or CD3+ cells), dendritic or other antiqen presenting cells.

Dwg.0/5

ACCESSION NUMBER: 2004-071004 [07] WPIDS

2004-035048 [03] CROSS REFERENCE: DOC. NO. CPI: C2004-029321

TITLE: Treatment of hyperproliferative disease, e.g. cancer,

rheumatoid arthritis, inflammatory bowel disease, or

leiomyomas, involves supplementing systemic or local

immune system by increasing lactoferrin.

DERWENT CLASS:

B04

INVENTOR(S): BARSKY, R; O'MALLEY, B; PETRAK, K; VARADHACHARY, A

PATENT ASSIGNEE(S):

(AGEN-N) AGENNIX INC

COUNTRY COUNT:

103

PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK | LA | PG |
|-----------|-----------|---------|----|----|
| | • | | | |
| | | | | |

WO 2003094952 A1 20031120 (200407)* EN 2

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU

ZA ZM ZW

AU 2003239393 Al 20031111 (200442)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| | | WO 2003-US14584 | 20030509 |
| AU 2003239393 | A1 | AU 2003-239393 | 20030509 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| | | |
| AU 2003239393 | Al Based on | WO 2003094952 |

PRIORITY APPLN. INFO: US 2002-379474P

20020510; US 20020510; US 20020510

2002-379441P 2002-379442P

L3 ANSWER 9 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Use of a lactoferrin composition for the treatment of
a respiratory disorder e.g. asthma, emphysema, bronchitis, chronic
obstructive pulmonary disease.

AN 2004-042695 [04] WPIDS

AB WO20,03099207 A UPAB: 20040115

NOVELTY - Treatment (M1) of a respiratory disorder comprising administrating a **lactoferrin composition** (c1), is new.

ACTIVITY - Antiasthmatic; Antiinflammatory; Antiallergic; Respiratory-Gen.

Allergic sheep were treated with recombinant human lactoferrin (rhLF) and compared to their historic controls. Baseline bronchoalveolar lavage fluid (BAL) samples were taken from all animals and baseline dose response curves to aerosol carbachol were obtained in all sheep 1 - 3 days before the start of dosing. The sheep were pre-treated with oral rhLF (1 or 1.5 g) twice daily for 3 days prior to allergen challenge. Plasma samples were taken at both the time of 1st dose on day 1 and again on day 3 at the time of the second daily dose. On the challenge day (day 4) the test sheep received rhLF in dose of 1 g or 1.5 g 30 minutes before, 4 hours after and 24 hours after allergen challenge. BAL samples were again taken and additional plasma samples were also taken before and immediately after rhLF administration. On the challenge day (day 4) measurements of lung resistance (RL) were obtained before and then repeated 30 minutes after treatment and then the sheep were challenged with Ascaris suum allergen. Measurements of RL were obtained immediately after challenge, hourly form 1 - 8 hours after challenge. The RL (%) (for rhLF(1 g)/rhLF(1.5 g)/control) was 350/550/500 (at 0 hour), 0/0/0 (after 4 hours) and 0/20/100 (after 8 hours). The peak delayed increase in RL (%) was 76/74/0; the delayed airway hypersensitivity (%) was 100/88/0; the % increase in total inflammatory cells in the lungs was -/100/0 for rhLF(1 g)/rhLF(1.5 g)/control respectively.

MECHANISM OF ACTION - Interleukin-18 stimulator; Stimulator of production or activity of immune cells (preferably T lymphocytes and natural killer cells, especially CD4+, CD8+ and CD3+ cells); Granulocyte Macrophage Colony Stimulating Factor (GM-CSF) stimulator; Stimulator of production, maturation or activity of immune cells (preferably dendritic or other antigen representing cells); Inhibitor of production or activity of pro-inflammatory cytokines.

The effect of oral administration of recombinant human lactoferrin (rhLF) on GM-CSF was tested in vivo. Mice (5 per group) were treated for 3 days daily with 300 mg/kg/day of rhLF. For a control, mice were only administered a pharmaceutical carrier. Twenty-four hours after administration of the LF or placebo for 3 days, animals were sacrificed and the small intestine tissue was removed for further analysis. Small intestinal epithelium was homogenized using a lysis buffer consisting of phosphate buffered saline (PBS), 1% Nonidet P-40, 0.5% sodium deoxycholate and 0.1% sodium dodecyl sulfate containing phenylmethylsulfonyl fluoride (10 micro g/ml). Homogenate was centrifuged for 10 minutes and was tested for GM-CSF levels. The rhLF increased the production of a key immunostimulatory cytokine, GM-CSF in the small intestine compared to placebo (19.4%).

USE - The method is useful for the treatment of allergic or non-allergic respiratory disorder including atopic asthma, non-atopic asthma, emphysema, bronchitis, chronic obstructive pulmonary disease, acute or chronic sinusitis, and allergic rhinitis (all claimed).

ADVANTAGE - (c1) enhances a mucosal immune response in the gastrointestinal tract; reduces the infiltration of inflammatory cells into the lung; reduces the delayed hypersensitivity associated with atopic or non-atopic asthma. The lactoferrin stimulates interleukin-18 in the gastrointestinal tract; stimulates the production, maturation or activity of immune cells (e.g. T lymphocytes (e.g. CD4+, CD8+, or CD3+ cells) or natural killer cells; stimulates GM-SCF in the gastrointestinal tract, thus stimulating the production, maturation or activity of immune cells (e.g. dendritic or other antigen presenting cells) and reduces the production or activity of pro-inflammatory cytokines.

Dwg.0/12 ACCESSION NUMBER:

2004-042695 [04] WPIDS

DOC. NO. CPI:

C2004-017566

TITLE:

Use of a lactoferrin composition for

the treatment of a respiratory disorder e.g. asthma, emphysema, bronchitis, chronic obstructive pulmonary $\frac{1}{2}$

disease.

DERWENT CLASS:

B05 B07 C03 C07 D16

INVENTOR (S):

GLYNN, P; VARADHACHARY, A

PATENT ASSIGNEE(S):

(GLYN-I) GLYNN P; (VARA-I) VARADHACHARY A; (AGEN-N)

AGENNIX INC

COUNTRY COUNT:

103

PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK | LA PG | |
|---------------|-------------|--------------|-------|--|
| | | | | |
| WO 2003099207 | Δ2 20031204 | (200404) * F | N 28 | |

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS

LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK

DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU

ZA ZM ZW

US 2004009896 A1 20040115 (200406) AU 2003233583 A1 20031212 (200443)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|--------------------------------|-------------------|------------------------------------|----------|
| WO 2003099207 US 2004009896 | A2 Al Provisional | WO 2003-US15763 US 2002-383280P | 20030520 |
| 05 2001005050 | Provisional | US 2002-410645P | 20020913 |

US 2003-441329 20030520 AU 2003-233583 20030520

AU 2003233583 A1

FILING DETAILS:

PRIORITY APPLN. INFO: US 2002-410645P

US 2002-410645P 20020913; US 2002-383280P 20020524; US 2003-441329 20030520

L3 ANSWER 10 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Treating a hyperproliferative disease (e.g. cancer, psoriasis, adenoma or atherosclerosis) in a subject comprises administering a composition of a human lactoferrin alone or in combination with standard anti-cancer therapies.

AN 2004-035048 [03] WPIDS

CR 2004-071004 [07]

AB

WO2003099323 A UPAB: 20050303

NOVELTY - Treating a hyperproliferative disease comprises administering orally, intravenously or topically to a subject a human

lactoferrin composition in an amount sufficient to

provide an improvement in the hyperproliferative disease in the subject.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a method of enhancing a mucosal immune response in the gastrointestinal tract in a subject, comprising administering orally to the subject a human lactoferrin;
- (2) a method of reducing growth of a neoplasm in a subject, comprising administering orally to the subject a human **lactoferrin composition** in an amount to reduce the growth of the neoplasm in the subject;
- (3) methods of enhancing a systemic or local immune response following the step of administering intravenously or topically to the subject a lactoferrin composition; and
- (4) methods of stimulating interleukin-18 or GFM-CSF in a subject, comprising administering to the subject the **lactoferrin** composition.

ACTIVITY - Cytostatic; Antirheumatic; Antiarthritic; Antiinflammatory; Osteopathic; Vasotropic; Antiarteriosclerotic; Antipsoriatic. No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The methods are useful in treating malignant neoplasms (e.g. melanoma or leukemia) and other hyperproliferative diseases such as rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas, hemangiomas, fibromas, vascular occlusion, restenosis, atherosclerosis, pre-neoplastic lesions, carcinoma in situ, oral hairy leukoplakia or psoriasis.

Dwg.0/5

ACCESSION NUMBER: 2004-035048 [03] WPIDS

CROSS REFERENCE: 2004-071004 [07] DOC. NO. CPI: C2004-011624

TITLE: Treating a hyperproliferative disease (e.g. cancer,

psoriasis, adenoma or atherosclerosis) in a subject comprises administering a composition of a human lactoferrin alone or in combination with standard

anti-cancer therapies.

DERWENT CLASS: B04

INVENTOR(S): BARSKY, R; PERICLE, F; PETRAK, K; VARADHACHARY, A; WANG,

Y; O'MALLEY, B

PATENT ASSIGNEE(S): (BARS-I) BARSKY R; (PERI-I) PERICLE F; (PETR-I) PETRAK K;

(VARA-I) VARADHACHARY A; (WANG-I) WANG Y; (OMAL-I)

O'MALLEY B; (AGEN-N) AGENNIX INC

COUNTRY COUNT: 104

PATENT INFORMATION:

| PA: | rent | NO | | | KII | ND I | DATI | Ξ | Ţ | VEE | K | | LA | I | ?G | | | | | | | | |
|------|------|------|------|----|-----|------|------|-----|-----|---------------|-----|------|----|------------------------------|----|----|----|----|----|----|----|----|----|
| . WO | 2003 | 3099 | 323 | 3 | A1 | 200 | 312 | 204 | (20 | 004 | 03) | * E1 | 1 | 51 | | | | | | | | | |
| | RW: | AT | ΒE | ВG | CH | CY | CZ | DE | DK | EΑ | EE | ES | FI | FR | GB | GH | GM | GR | HU | ΙE | ΙT | KE | LS |
| | | LU | MC | MW | ΜZ | NL | OA | PT | RO | SD | SE | SI | SK | $\operatorname{\mathtt{SL}}$ | SZ | TR | TZ | UG | ZM | ZW | | | |
| | W : | ΑE | AG | AL | AM | ΑT | ΑU | ΑZ | BA | BB | ВG | BR | BY | BZ | CA | CH | CN | CO | CR | CU | CZ | DE | DK |
| | | DM | DΖ | EC | EE | ES | FΙ | GB | GD | GE | GH | GM | HR | HU | ID | IL | IN | IS | JΡ | KE | KG | KP | KR |
| | | ΚZ | LC | LK | LR | LS | LT | LU | LV | MA | MD | MG | MK | MN | MW | MX | MZ | NI | NO | NZ | MO | PH | ΡĻ |
| | | PT | RO | RU | SC | SD | SE | SG | SK | \mathtt{SL} | TJ | TM | TN | TR | TT | TZ | UA | UG | US | UZ | VC | VN | YU |
| | | ZA | ZM | ZW | | | | | | | | | | | | | | | | | | | |
| US | 2004 | 009 | 895 | 5 | A1 | 200 | 040 | L15 | (20 | 04(| 06) | | | | | | | | | | | | |
| US | 2004 | 082 | 2504 | Į | A1 | 200 | 0404 | 129 | (20 | 0042 | 29) | | | | | | | | | | | | |
| ΑU | 2003 | 3273 | 3182 | 2 | A1 | 200 | 312 | 212 | (20 | 0044 | 13) | | | | | | | | | | | | |
| ΕP | 1507 | 7554 | Į. | | A1 | 200 | 0502 | 223 | (20 | 005 | 15) | Eì | 1 | | | | | | | | | | |
| | R: | ΑL | ΑT | BE | ВG | CH | CY | CZ | DE | DK | EE | ES | FI | FR | GB | GR | HU | ΙĖ | IT | LI | LT | LU | LV |
| | | MC | MK | NL | PT | RO | SE | SI | SK | TR | | | | | | | | | | | | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| WO 2003099323 | A1 | WO 2003-US14789 | 20030509 |
| US 2004009895 | Al Provisional | US 2002-379441P | 20020510 |
| | Provisional | US 2002-379442P | 20020510 |
| | Provisional | US 2002-379474P | 20020510 |
| | | US 2003-434769 | 20030509 |
| US 2004082504 | Al Provisional | US 2002-379441P | 20020510 |
| | Provisional | US 2002-379442P | 20020510 |
| | Provisional | US 2002-379474P | 20020510 |
| | | US 2003-435319 | 20030509 |
| AU 2003273182 | A1 | AU 2003-273182 | 20030509 |
| EP 1507554 | A1 | EP 2003-755357 | 20030509 |
| | | WO 2003-US14789 | 20030509 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|-----------------------------|---|--|
| AU 2003273182 EP 1507554 | Al Based on Al Based on | WO 2003099323 WO 2003099323 |
| PRIORITY APPLN. INFO | US 2002-379474P 2002-379441P 2002-379442P 2003-434769 2003-435319 | 20020510; US 20020510; US 20020510; US 20030509; US 20030509 |

- L3 ANSWER 11 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
- TI Immobilized lactoferrin composition comprises natural

substrate and carrier useful as antimicrobicide e.g. for preventing food poisoning or diarrhea or in cosmetics and cleaners.

- AN 2001-041106 [05] WPIDS
- CR 2001-061417 [07]; 2004-267982 [25]
- AB WO 200072874 A UPAB: 20041006

NOVELTY - Composition comprises a defined dispersion of lactoferrin immobilized on a natural substrate via the N-terminus region of the lactoferrin and a carrier.

DETAILED DESCRIPTION - Composition comprises:

(a) a defined dispersion of lactoferrin immobilized on a natural substrate via the N-terminus region of the lactoferrin; and (b) a carrier.

INDEPENDENT CLAIMS are also included for methods of preventing or inhibiting growth and/or adhesion of a microbe (i) on or in a human, (ii) on or in a non-human vertebrate subject or (iii) on a biological surface or in a biological fluid comprising treating (i)-(iii) with a composition comprising an isolated lactoferrin immobilized on a natural substrate via the N-terminus region of the lactoferrin.

ACTIVITY - Antimicrobial; Antibacterial; Fungicide; Protozoacide.

In assays a 1 % mixture of ImLF and nLF in 0.001 M citric acid, 0.01 M sodium bicarbonate and 0.1 M sodium chloride after 24 hours gave 100 % inhibition of Escherichia coli serotype O157:H7 in a 50 mu l bacterial suspension containing 106 cells/ml.

USE - As antimicrobicides useful as human or veterinary pharmaceuticals (e.g. for preventing food poisoning or treating diarrhea), cosmetics, cleansers (e.g. skin cleansers, sanitary wipes or shampoos), mouth washes, dentrifices, bandages, food supplements, preservatives for biological fluids (e.g. semen, blood, urine or cerebro-spinal fluid) or for preventing microbial growth and/or adhesion on biological surfaces (e.g. cell skin or eggshell surface)

Dwg.0/0

ACCESSION NUMBER: 2001-041106 [05] WPIDS

CROSS REFERENCE: 2001-061417 [07]; 2004-267982 [25]

DOC. NO. CPI: C2001-011971

TITLE: Immobilized lactoferrin composition

comprises natural substrate and carrier useful as antimicrobicide e.g. for preventing food poisoning or

diarrhea or in cosmetics and cleaners.

DERWENT CLASS: A96 B04 C03 D13 D16 D21

INVENTOR(S): NAIDU, A S

PATENT ASSIGNEE(S): (NAID-I) NAIDU A S; (NAID-I) NAIDU A

COUNTRY COUNT: 93

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000072874 A1 20001207 (200105)* EN 60

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000054491 A 20001218 (200118) AU 2003204900 A1 20030724 (200464)#

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE ' |
|---|----------------------|---|--|
| WO 2000072874 AU 2000054491 AU 2003204900 | A1 A A1 Div ex | WO 2000-US14820 AU 2000-54491 AU 2000-53035 AU 2003-204900 | 20000526 20000526 20000526 20030624 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|------------|---------------|
| | | |
| AU 2000054491 | A Based on | WO 2000072874 |

PRIORITY APPLN. INFO: US 1999-322700 19990528; AU

2003-204900 20030624

ANSWER 12 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
Treating cancer, such as melanoma, lung hepatocarcinoma, retinoblastoma, astrocytoma, glioblastoma and leukemia, by administering a cancer immunotherapy and a lactoferrin composition;

involving vector-mediated immunomodulator cytokine gene transfer and expression in dendrite cell for therapy

AN 2005-07224 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - Treating cancer comprising administering a cancer immunotherapy and an adjuvant that is a **lactoferrin composition** administered to provide an improvement in the cancer in the subject, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a

method of enhancing the immune system in a subject suffering from cancer or susceptible to cancer, comprising administering to the subject a cancer immunotherapy and an adjuvant that is a **lactoferrin** composition.

BIOTECHNOLOGY - Preferred Method: The lactoferrin composition in treating cancer is dispersed in a carrier. The lactoferrin is recombinant bovine or human lactoferrin, where the lactoferrin composition comprises an N-terminal lactoferrin variant that lacks at least the N-terminal glycine residue and has at least 1-50% of the lactoferrin composition . The amount of the lactoferrin that is administered is 10 mg to 100 g per day. The cancer is a neoplasm, such as melanoma, non-small cell lung, small cell lung, lung hepatocarcinoma, retinoblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, squamous cell, head, neck, gum, tongue, breast, pancreatic, prostate, renal, bone, testicular, ovarian, mesothelioma, sarcoma, cervical, gastrointestinal, lymphoma, brain, colon and bladder, preferably hematopoietic neoplasm including acute myelogenous leukemia, acute lymphoblastic leukemia, myelodysplastic syndrome, chronic myelomonocytic leukemia, juvenile myelomonocyte leukemia, multiple myeloma and chronic lymphocytic leukemia. The lactoferrin composition is administered orally, parenterally or topically. The immunotherapy comprises antigen presenting cells, administration of a tumor antigen or a nucleic acid sequence expressing a cancer antigen to the subject. The nucleic acid sequence is contained in a vector. The immunotherapy further comprises administration of a vector containing a nucleic acid sequence expressing an immunomodulatory cytokine or a protein or nucleic acid that promotes the recognition of a cancer antigen in the subject. The lactoferrin composition is administered ex vivo to the antigen presenting cells prior to administering the cells to the subject. The cells are allogeneic or syngeneic. The composition is administered simultaneously and/or sequentially with the immunotherapy. The method further comprises additionally administering chemotherapy, immunotherapy, surgery, biotherapy, radiotherapy or their combination. The lactoferrin in enhancing the immune system is recombinant human or bovine lactoferrin, and is administered orally, and stimulates the production of interleukin-18, GM-CSF or MIP-3 alpha that stimulate the production, maturation, migration or activity of immune cells, where the immune cells are T lymphocytes, natural killer cells, dendritic cells, antigen presenting cells or progenitor cells. The T lymphocytes are CD4+, CD8+ and CD3+ cells.

ACTIVITY - Cytostatic. BALB/Cys mice were challenged subcutaneously in the middle of the left flank with 0.2 ml of a single-cell suspension containing 1x105 Her-2/neu+Transplantable carcinoma (TUBO) cells. Oral lactoferrin or placebo was administered two days before TUBO injection and for 3 weeks. Tumors were measured twice a week for the duration of the experiment. The results showed that mice treated with oral LF displayed a significant tumor inhibition, whereas no activity was observed in mice treated with placebo or left untreated.

MECHANISM OF ACTION - Vaccine.

USE - The methods and compositions of the present invention are useful for diagnosing, preventing, staging and/or treating cancer and tumor disorders, including melanoma, non-small cell lung, small cell lung, lung hepatocarcinoma, retinoblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, squamous cell, head, neck, gum, tongue, breast, pancreatic, prostate, renal, bone, testicular, ovarian, mesothelioma, sarcoma, cervical, gastrointestinal, lymphoma, brain, colon and bladder, preferably hematopoietic neoplasm such as acute myelogenous leukemia, acute lymphoblastic leukemia, myelodysplastic syndrome, chronic myelomonocytic leukemia, juvenile myelomonocyte leukemia, multiple myeloma and chronic lymphocytic leukemia.

ADMINISTRATION - The dosage of the lactoferrin composition ranges from 1 mg o 100 g per day. Routes of administration of the composition include oral, subcutaneous, intramuscular, intraperitoneal, intravenous, intraarterial, transendocardial, transepicardial, intramyocardial, intrathecal and topical. (22 pages)

ACCESSION NUMBER: 2005-07224 BIOTECHDS

TITLE: Treating cancer, such as melanoma, lung hepatocarcinoma,

retinoblastoma, astrocytoma, glioblastoma and leukemia, by

administering a cancer immunotherapy and a

lactoferrin composition;

involving vector-mediated immunomodulator cytokine gene transfer and expression in dendrite cell for therapy

AUTHOR: VARADHACHARY A; PERICLE F

PATENT ASSIGNEE: AGENNIX INC

PATENT INFO: US 2005019342 27 Jan 2005 APPLICATION INFO: US 2004-862213 7 Jun 2004

PRIORITY INFO: US 2004-862213 7 Jun 2004; US 2003-476318 6 Jun 2003

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2005-111859 [12]

ANSWER 13 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN New beta lactoglobulin, alpha lactalbumin or cow lactoferrin derived peptide, useful for treating systemic inflammatory response syndrome, retinopathy and rheumatoid arthritis;

beta-lactoglobulin, alpha-lactalbumin or cattle lactoferrin composition for disease therapy

AN 2004-23477 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - A beta-lactoglobulin, alpha-lactalbumin or cow lactoferrin derived peptide (I) and its salt, is new.

DETAILED DESCRIPTION - A beta-lactoglobulin, alpha-lactalbumin or cow lactoferrin derived peptide (I) is chosen from (a) peptides of formula (S1)-(S4), given below; and (b) peptides of sequence Leu-Asp-Gln-Trp-Leu-Cys-Glu-Lys, Phe-Lys-Ile-Asp-Ala-Leu-Asn-Glu, Ile-Asp-Ala-Leu-Asn-Glu-Asn-Lys, Ile-Pro-Ala-Val-Phe-Lys, Ile-Pro-Ala-Val-Phe-Lys-Ile-Asp-Ala-Leu-Asn-Glu-Asn-Lys, Ile-Pro-Ala-Val-Phe-Lys-Ile-Asp-Ala-Leu-Asn-Glu, Glu-Thr-Ala-Glu-Glu-Val-Lys, Leu-Gly-Ala-Pro-Ser-Ile-Thr-Cys-Val-Arg, Trp-Gln-Trp-Arg, and Glu-Asp-Leu-Ile-Trp-Lys. X1-Leu-Ala-His-Lys-X2-X3 (S1), where, X1 = absent or Trp; X2 = absent or Ala; X3 = absent or Leu. Y1-Leu-Pro-Met-His-Y2-Y3, (S2) where, Y1 = absent or Ala; Y2 = absent or Ile; Y3 = absent or Arg. Y4-Ile-Asp-Ala-Leu-Asn-Glu-Y5, (S3) where, Y4 = absent or Lys; Y5 = absent or Asn. Ile-Pro-Ala-Val-Phe-Lys-Y6-Y7-Y8-Y9-Y10, (S4) where, Y6 = absent or Ile; Y7 = absent or Asp; Y8 = absent or Ala; Y9 = absent or Leu; Y10 = absent or Asn. INDEPENDENT CLAIMS are also included for: (1) an (anti-inflammatory) pharmaceutical containing (I); and (2) an oral or enteral nutritive composition (C1) for treating inflammatory reactions including systemic inflammatory response syndrome which accompanies biological invasion, comprising (I) or its salt.

ACTIVITY - Antiarthritic; Antiinflammatory; Antimicrobial; Antirheumatic; Antiulcer; Cardiant; Dermatological; Gastrointestinal-Gen.; Hepatotropic; Immunosuppressive; Nephrotropic; Neuroprotective; Ophthalmological; Virucide; Vulnerary.

MECHANISM OF ACTION - TNF synthesis inhibitor; IL-6 synthesis inhibitor. In vivo analysis of inhibition of IL-6 production by peptides derived from beta-lactoglobulin and alpha-lactalbumin was carried out as follows. The 6-week old male mice were taken. They were divided into beta-lactoglobulin trypsin digested product administration group (5 mg/mouse) and alpha-lactalbumin trypsin digested product administration group (5 mg/mouse). The peptide comprising a sequence of Phe-Lys-Ile-Asp-Ala-Leu-Asn-Glu derived from beta-lactoglobulin and a peptide having a sequence of Leu-Asp-Gln-Trp-Leu-Cys-Glu-Lys derived from alpha-lactalbumin, were orally administered into the mice. The lipopolysaccharide was intraperitoneally administered at a concentration of 50 microgram/mouse. After 90 minutes, blood was obtained from the mice and blood serum was collected by centrifugation. The IL-6 level in the blood serum was measured by enzyme linked immunosorbent assay (ELISA). The result indicated reduction in the concentration of IL-6 level in the beta-lactoglobulin trypsin digested product administered group and alpha-lactalbumin trypsin digested product administered group.

USE - Peptides (I) are useful for manufacturing a pharmaceutical. (I) and their salts are useful for manufacturing an anti-inflammatory agent, and for manufacturing oral and enteral nutritive composition for

treating inflammatory reaction including systemic inflammatory response syndrome, which accompanies biological invasion such as surgery, external injury, thermal burn, infectious disease, acute pancreatitis, liver failure, peritonitis or malignant tumor (claimed). (I) is useful in treating or preventing inflammatory diseases such as retinopathy, nephropathy, neuropathy, rheumatoid arthritis, myelitis, inflammatory bowel disease, Crohn's disease, ulcerative colitis, systemic lupus erythematosus, myocardial infarction, diseases caused by Herpesvirus and influenza virus, etc.

ADMINISTRATION - A pharmaceutical comprising (I), is administered by oral route (claimed). No specific dosage details are given.

ADVANTAGE - (I) has an inflammatory cytokine production inhibitory activity. (I) is effective in the treatment or prevention of inflammatory diseases resulting from an abnormal production of TNF-alpha and interleukin (IL)-6.

EXAMPLE - Whey protein isolated substance (containing beta-lactoglobulin and alpha-lactalbumin) was dissolved in phosphate buffer at a concentration of 100 mg/ml. Then, trypsin (50 mg) was added. The mixture was allowed to react at 37 degrees C for 6 hours. After the reaction, centrifugation was carried out and the precipitate was removed. Then, ultrafiltration was carried out using membrane having a molecular weight cut off 10000. The active ingredient of the trypsin-hydrolyzed substances was fractionated by reverse phase HPLC, and the peptides derived from beta-lactoglobulin and alpha-lactalbumin were obtained. The peptides derived from beta-lactoglobulin and alpha-lactalbumin, were found to comprise sequences such as Ala-Leu-Pro-Met-His, Ala-Leu-Pro-Met-His-Ile-Arg, Phe-Lys-Ile-Asp-Ala-Leu-Asn-Glu, and Leu-Ala-His-Lys-Ala-Leu, Trp-Leu-Ala-His-Lys and Leu-Asp-Gln-Trp-Leu-Cys-Glu-Lys. The peptides when subjected to analysis, was found to possess TNF-alpha production inhibitory effect. (41 pages)

ACCESSION NUMBER: 2004-23477 BIOTECHDS

TITLE:

New beta lactoglobulin, alpha lactalbumin or cow lactoferrin derived peptide, useful for treating systemic inflammatory response syndrome, retinopathy and rheumatoid arthritis;

beta-lactoglobulin, alpha-lactalbumin or cattle

lactoferrin composition for disease

therapy

PATENT INFO:

PATENT ASSIGNEE: MEIJI MILK PROD CO LTD JP 2004196707 15 Jul 2004

APPLICATION INFO: JP 2002-367035 18 Dec 2002 PRIORITY INFO: JP 2002-367035 18 Dec 2002; JP 2002-367035 18 Dec 2002

DOCUMENT TYPE: Patent LANGUAGE: Japanese

AN

AB

OTHER SOURCE:

WPI: 2004-521533 [50]

ANSWER 14 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN ΤI

Treating subject suffering from pain, involves administering lactoferrin composition, to provide improvement in pain

in subjects; use of recombinant lactoferrin in a pharmaceutical composition for pain therapy

2004-17265 BIOTECHDS

DERWENT ABSTRACT:

NOVELTY - Treating (M1) a subject suffering from pain, involves administering to the subject a lactoferrin composition , to provide an improvement in pain in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for modulating acute pain or chronic pain in a subject, involves administering lactoferrin composition to the subject

to provide an improvement in acute pain or chronic pain in the subject. WIDER DISCLOSURE - The following are disclosed: (1)

lactoferrin composition; and (2) pharmaceutical

composition comprising lactoferrin composition.

BIOTECHNOLOGY - Preferred Method: In (M1), the lactoferrin composition reduces the severity of the patient's pain. The lactoferrin composition is dispersed in a carrier. The lactoferrin is mammalian, preferably human or bovine lactoferrin. The lactoferrin is recombinant lactoferrin. The lactoferrin

composition comprises an N-terminal lactoferrin variant that lacks N-terminal glycine residue. The N-terminal lactoferrin variant comprises at least 1%-50% of the lactoferrin composition. (M1) further involves administering an antacid in conjunction with lactoferrin composition, and administering lactoferrin in a delayed release formulation. The lactoferrin release occurs in small intestine or large intestine. The lactoferrin composition reduces the production or activity of pro-inflammatory cytokines, or enhances the production or activity of cytokines (TNF-alpha). (M1) further involves administering a metal chelator such as EDTA or (ethylenebis(oxyethylenenitrilo))tetraacet ic acid (EGTA), dispersed in a carrier. Preferably, the chelator is EDTA. (M1) further involves administering a lactoferrin composition in combination with pharmacological agent used to relieve pain. The pharmacological agent includes non-steroidal anti-inflammatory drugs (NSAIDS), opioid analgesics, second generation NSAIDs and anti-depressant drugs. (M1) further involves administering the lactoferrin composition in combination with non-pharmacological pain management technique chosen from acupuncture, acupressure, local anesthesia, regional anesthesia (spinal anesthesia), general anesthesia (intravenous anesthetics or opioid pump) and

chiropractic.

ACTIVITY - Analgesic. The ability of recombinant human lactoferrin (rhLF) to reduce heat-induced pain in tail flick test in mice was done as follows. Mice received 1000 mg/kg rhLF or placebo orally 60 minutes prior to test (N = 5 per group). The tail flick test measured the time (max 15 seconds) required to elicit the radiation heat-induced tail-flick response in mice. Result showed that oral lactoferrin treatment significantly reduced pain in mice.

MECHANISM OF ACTION - Reduces production or activity of pro-inflammatory cytokines; Enhances production or activity of cytokines (claimed).

USE - (M1) is useful for treating a subject suffering from pain (acute or chronic pain) (claimed).

ADMINISTRATION - Administration of lactoferrin is orally, parenterally or topically, at a dose of 1 ng-100 g/day (preferably 0.1 g/10 g/day). The lactoferrin release occurs in small intestine or large intestine. The amount of EDTA that is administered as a chelator with the lactoferrin is 1 ng-1 g/day (all claimed). (30 pages)

ACCESSION NUMBER: 2004-17265 BIOTECHDS

TITLE:

Treating subject suffering from pain, involves administering

lactoferrin composition, to provide
improvement in pain in subjects;

use of recombinant lactoferrin in a pharmaceutical

composition for pain therapy

AUTHOR: VARADHACHARY A; PETRAK K

PATENT ASSIGNEE: AGENNIX INC

PATENT INFO: WO 2004054608 1 Jul 2004 APPLICATION INFO: WO 2003-US39358 11 Dec 2003

PRIORITY INFO: US 2003-498248 27 Aug 2003; US 2002-432937 12 Dec 2002

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2004-488007 [46]

ANSWER 15 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
Treating tissue or organ (e.g., kidney, heart, liver, lung or pancreas)
transplant rejection in recipient involves administering a
lactoferrin composition to the recipient to attenuate
tissue or organ transplant rejection;

using recombinant lactoferrin for graft-versus-host-disease prevention and therapy and in tissue and organ transplantation ${\bf r}$

AN 2004-16861 BIOTECHDS

AB DERWENT ABSTRACT:

NOVELTY - Treating a tissue or organ transplant rejection in a recipient involves administering to the recipient, a **lactoferrin composition** to attenuate the tissue or organ transplant rejection.

WIDER DISCLOSURE - (1) compositions comprising lactoferrin dispersed

in a carrier; (2) treating or preventing graft-versus-host-disease (GVHD) in a recipient by administering lactoferrin composition to the donor organ or donor tissue prior to transplantation into the recipient, or administering to the recipient, lactoferrin composition; and (3) treating, preventing or attenuating the severity of xenograft tissue or xenograft organ transplant rejection in a recipient by administering lactoferrin composition to xenograft donor.

BIOTECHNOLOGY - Preferred Method: The lactoferrin composition regulates T cell responses by inducing transplant tolerance in the recipient, and is dispersed in a carrier. The lactoferrin is mammalian lactoferrin e.g., human or bovine lactoferrin. Optionally, the lactoferrin is recombinant lactoferrin comprising an N-terminal lactoferrin variant, where the variant lacks at least the N-terminal glycine residue. The N-terminal variant comprises at least 1-50% pf the lactoferrin composition. The lactoferrin modulates the mucosal or systemic immune system in a subject by increasing the amount of lactoferrin in the gastrointestinal tract, where preferably lactoferrin stimulates interleukin-18 or MIP-3alpha in the gastrointestinal tract; regulates the activity of immune cells such as B lymphocytes and T lymphocytes (chosen from CD4+/CD3+, CD8+/CD3+ cells and natural killer (NK)-T cells), antigen-presenting cells, natural killer cells, macrophages and granulocytes; and regulates production or activity of pro-inflammatory cytokines. The method further comprises administering a metal chelator dispersed in a carrier.

ACTIVITY - Immunosuppressive.

MECHANISM OF ACTION - Reducer of allogenic immune responses in recipient; Regulator of T cell responses; Stimulator of interleukin-18 or MIP-3-alpha in the gastrointestinal tract; Regulator of activity of B and T lymphocytes, antigen-presenting cells, natural killer cells, macrophages and granulocytes; Regulator of production or activity of pro-inflammatory cytokines (all claimed). Heterotopic heart transplantation in 8-10 weeks old rats (BUF, donor to WF, recipient) was performed using standard microsurgical technique of end-to-side anastomoses to recipient aorta and vena cava. Graft survival was defined as the last day of transabdominally palpable cardiac contractions. Recipients were treated with either placebo or recombinant human lactoferrin (rhLF) (625 mg/Kg) for 14 days starting seven days prior to the transplant. The results showed that lactoferrin alone significantly extended cardiac allograft survival.

USE - For treating tissue (bone marrow or peripheral stem cells) or organ (kidney, heart, lung, liver, or pancreas) transplant rejection in the recipient (claimed).

ADMINISTRATION - The lactoferrin composition is administered orally, and the method further involves administering an antacid in conjunction with the lactoferrin composition, or administering the lactoferrin in delayed release formulation, where the release occurs in small and large intestine. Optionally, the lactoferrin composition is administered parenterally. The amount of the lactoferrin composition that is administered is 1 mg-20 g/day, preferably 0.1-5 g/day (all claimed). The metal chelator (EDTA) is administered in dosages of 1 ng-1 g/day.

ADVANTAGE - The method induces permanent allograft or xenograft acceptance and reducing the incidence of graft-versus-host-disease involved in bone marrow or peripheral stem cells transplantation. (38 pages)

ACCESSION NUMBER: 2004-16861 BIOTECHDS

TITLE: Treating tissue or organ (e.g., kidney, heart, liver, lung or

pancreas) transplant rejection in recipient involves

administering a lactoferrin composition

to the recipient to attenuate tissue or organ transplant

rejection;

using recombinant lactoferrin for graft-versus-host-disease prevention and therapy and in tissue and organ

transplantation

AUTHOR: VARADHACHARY A; PERICLE F

PATENT ASSIGNEE: AGENNIX INC

PATENT INFO: WO 2004052305 24 Jun 2004

APPLICATION INFO: WO 2003-US39265 10 Dec 2003

PRIORITY INFO: US 2003-498338 27 Aug 2003; US 2002-432113 10 Dec 2002

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2004-468695 [44]

L3 ANSWER 16 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI Treating a cardiovascular disease comprises administering to a subject an effective amount of a **lactoferrin composition** to

provide an improvement in the cardiovascular disease in the subject;

involving vector-mediated gene transfer and expression in host cell for use in gene therapy

2004-16843 BIOTECHDS

AB DERWENT ABSTRACT:

ΑN

NOVELTY - Treating a cardiovascular disease comprises administering to a subject an effective amount of a lactoferrin

composition to provide an improvement in the cardiovascular disease in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of modulating atherosclerosis in a subject comprising administering to the subject an effective amount of a ${\bf lactoferrin}$

composition to modulate atherosclerosis in the subject.

BIOTECHNOLOGY - Preferred Method: In treating a cardiovascular disease, the cardiovascular disease is atherosclerosis. The lactoferrin composition reduces levels of circulating total cholesterol, low-density lipoproteins (LDL), very low-density lipoproteins (VLDL), or triglycerides in the subject. The lactoferrin composition increases the levels of circulating high-density lipoproteins (HDL) in the subject. The lactoferrin composition reduces the levels of vascular inflammation, circulating C-reactive protein (CRP), proliferation of vascular smooth muscle cells, vascular spasm or vascular hyper-reactivity in the subject. The lactoferrin composition promotes endothelial integrity or healing in the subject. The lactoferrin composition is dispersed in a carrier. The lactoferrin is mammalian lactoferrin. The lactoferrin is human or bovine. The

lactoferrin is recombinant lactoferrin. The lactoferrin composition comprises an N-terminal lactoferrin variant. The N-terminal lactoferrin variant lacks at least the N-terminal glycine residue. The N-terminal lactoferrin variant comprises at least 1% to at least 50% of the lactoferrin composition. The

lactoferrin composition reduces the production or
activity of pro-inflammatory cytokines. The method further comprises
administering a lactoferrin composition in

combination with an anti-cholesterol agent or an anti-inflammatory agent. The anti-cholesterol agent is selected from cholesterol absorption inhibitors, bile acid sequestrants, nicotinic acid, fibric acids and HMG-coA reductase inhibitors. The bile acid sequestrants are selected from cholestyramine, colestipol and colesevalam. The fibric acids are selected from gemfibrozil, fenofibrate and clofibrate. The HMG-coA reductase inhibitors are selected from lovastatin, pravastatin, simvastatin, fluvastatin, atorvastatin and cerivastatin. In modulating atherosclerosis in a subject, the modulating is reducing the incidence or severity of atherosclerosis in the subject.

ACTIVITY - Cardiant; Antiarteriosclerotic. No biological data given.
MECHANISM OF ACTION - Gene therapy; HMG-coA reductase inhibitor.
USE - The method is useful for treating a cardiovascular disease,
e.g. atherosclerosis (claimed).

ADMINISTRATION - Dosage is 1 ng-20 g per day or 0.1-5 g per day. The lactoferrin composition is administered parenterally, e.g. subcutaneously, intramuscularly, intraperitoneally, intravenously, intraarterially, intramyocardially, transendocardially,

transepicardially, or intrathecally, or orally (all claimed). (38 pages)

ACCESSION NUMBER: 2004-16843 BIOTECHDS TITLE: Treating a cardiovasc

Treating a cardiovascular disease comprises administering to a subject an effective amount of a lactoferrin composition to provide an improvement in the cardiovascular disease in the subject;

involving vector-mediated gene transfer and expression in

host cell for use in gene therapy

AUTHOR: VARADHACHARY A; GLYNN P; WANG Y; ENGELMAYER J

PATENT ASSIGNEE: AGENNIX INC; VARADHACHARY A
PATENT INFO: WO 2004050037 17 Jun 2004
APPLICATION INFO: WO 2003-US38540 4 Dec 2003

PRIORITY INFO: US 2003-498337 27 Aug 2003; US 2002-430867 4 Dec 2002

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2004-460986 [43]

ANSWER 17 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN Use of a lactoferrin composition for the treatment of a respiratory disorder e.g. asthma, emphysema, bronchitis, chronic obstructive pulmonary disease;

human recombinant lactoferrin for allergic, non-allergic respiratory disorder, atopic asthma, non-atopic asthma, emphysema, bronchitis, chronic obstructive pulmonary disease, acute, chronic sinusitis or allergic rhinitis therapy

2004-04222 BIOTECHDS

DERWENT ABSTRACT:

AN

AΒ

NOVELTY - Treatment (M1) of a respiratory disorder comprising administrating a **lactoferrin composition** (c1), is new.

ACTIVITY - Antiasthmatic; Antiinflammatory; Antiallergic; Respiratory-Gen. Allergic sheep were treated with recombinant human lactoferrin (rhLF) and compared to their historic controls. Baseline bronchoalveolar lavage fluid (BAL) samples were taken from all animals and baseline dose response curves to aerosol carbachol were obtained in all sheep 1 - 3 days before the start of dosing. The sheep were pre-treated with oral rhLF (1 or 1.5 g) twice daily for 3 days prior to allergen challenge. Plasma samples were taken at both the time of 1st dose on day 1 and again on day 3 at the time of the second daily dose. On the challenge day (day 4) the test sheep received rhLF in dose of 1 g or 1.5 g 30 minutes before, 4 hours after and 24 hours after allergen challenge. BAL samples were again taken and additional plasma samples were also taken before and immediately after rhLF administration. On the challenge day (day 4) measurements of lung resistance (RL) were obtained before and then repeated 30 minutes after treatment and then the sheep were challenged with Ascaris suum allergen. Measurements of RL were obtained immediately after challenge, hourly form 1 - 8 hours after challenge. The RL (%) (for rhLF(1 g)/rhLF(1.5 g)/control) was 350/550/500 (at 0 hour), 0/0/0 (after 4 hours) and 0/20/100 (after 8 hours). The peak delayed increase in RL (%) was 76/74/0; the delayed airway hypersensitivity (%) was 100/88/0; the % increase in total inflammatory cells in the lungs was -/100/0 for rhLF(1 g)/rhLF(1.5 g)/control respectively.

MECHANISM OF ACTION - Interleukin-18 stimulator; Stimulator of production or activity of immune cells (preferably T lymphocytes and natural killer cells, especially CD4+, CD8+ and CD3+ cells); Granulocyte ${\tt Macrophage\ Colony\ Stimulating\ Factor\ (GM-CSF)\ stimulator;\ Stimulator\ of}$ production, maturation or activity of immune cells (preferably dendritic or other antigen representing cells); Inhibitor of production or activity of pro-inflammatory cytokines. The effect of oral administration of recombinant human lactoferrin (rhLF) on GM-CSF was tested in vivo. Mice (5 per group) were treated for 3 days daily with 300 mg/kg/day of rhLF. For a control, mice were only administered a pharmaceutical carrier. Twenty-four hours after administration of the LF or placebo for 3 days, animals were sacrificed and the small intestine tissue was removed for further analysis. Small intestinal epithelium was homogenized using a lysis buffer consisting of phosphate buffered saline (PBS), 1% Nonidet P-40, 0.5% sodium deoxycholate and 0.1% sodium dodecyl sulfate containing phenylmethylsulfonyl fluoride (10 microg/ml). Homogenate was centrifuged for 10 minutes and was tested for GM-CSF levels. The rhLF increased the production of a key immunostimulatory cytokine, GM-CSF in the small intestine compared to placebo (19.4%).

USE - The method is useful for the treatment of allergic or non-allergic respiratory disorder including atopic asthma, non-atopic

asthma, emphysema, bronchitis, chronic obstructive pulmonary disease, acute or chronic sinusitis, and allergic rhinitis (all claimed).

ADMINISTRATION - (cl) is administered in a dosage of 1 mg-1 g

(preferably 10 mg-1 g) per day orally (claimed).

ADVANTAGE - (c1) enhances a mucosal immune response in the gastrointestinal tract; reduces the infiltration of inflammatory cells into the lung; reduces the delayed hypersensitivity associated with atopic or non-atopic asthma. The lactoferrin stimulates interleukin-18 in the gastrointestinal tract; stimulates the production, maturation or activity of immune cells (e.g. T lymphocytes (e.g. CD4+, CD8+, or CD3+ cells) or natural killer cells; stimulates GM-SCF in the gastrointestinal tract, thus stimulating the production, maturation or activity of immune cells (e.g. dendritic or other antigen presenting cells) and reduces the production or activity of pro-inflammatory cytokines.

EXAMPLE - No suitable example given. (28 pages)

ACCESSION NUMBER: 2004-04222 BIOTECHDS

TITLE: Use of a lactoferrin composition for the

treatment of a respiratory disorder e.g. asthma, emphysema,

bronchitis, chronic obstructive pulmonary disease;

human recombinant lactoferrin for allergic, non-allergic respiratory disorder, atopic asthma, non-atopic asthma, emphysema, bronchitis, chronic obstructive pulmonary disease, acute, chronic sinusitis or allergic rhinitis

therapy

AUTHOR: GLYNN P; VARADHACHARY A

PATENT ASSIGNEE: AGENNIX INC

PATENT INFO: WO 2003099207 4 Dec 2003 APPLICATION INFO: WO 2003-US15763 20 May 2003

PRIORITY INFO: US 2002-410645 13 Sep 2002; US 2002-383280 24 May 2002

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2004-042695 [04]

L3 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Lactoferrin composition for inducing specific

antibodies against lipid A of gram-negative microorganisms

AB Oral intake of lactoferrin induces production of specific IgG antibodies against lipid A in blood serum. The oral composition also shows immune responses against LPS blood serum type and against gram-neg.

microorganisms of different strains. The composition added to infant milk

formula produces no ill effects.

ACCESSION NUMBER: 2001:872964 HCAPLUS

DOCUMENT NUMBER:

136:5073

TITLE: Lactoferrin composition for

inducing specific antibodies against lipid A of

gram-negative microorganisms

INVENTOR(S): Nakamura, Yoshitaka; Takahashi, Takeshi; Yajima, Koji;

Kuwata, Tamotsu

PATENT ASSIGNEE(S): Meiji Milk Products, Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2001333737 A2 20011204 JP 2001-85214 20010323
PRIORITY APPLN. INFO.: JP 2000-84814 A 20000324

=> d his

SOURCE:

(FILE 'HOME' ENTERED AT 15:53:22 ON 16 MAR 2005)

FILE 'MEDLINE, JAPIO, BIOSIS, WPIDS, JICST-EPLUS, BIOTECHDS, HCAPLUS, SCISEARCH, CEN, CEABA-VTB, BIOBUSINESS, EMBASE, DGENE' ENTERED AT

15:54:03 ON 16 MAR 2005 L1 1 S LACTOFERRIN AND (REDUCE CIRCULATING LEVELS OF CHOLESTEROL?) 0 S LACTOFERRIN COMPOSITION ADJ2 ADMINISTRATION L2 18 S LACTOFERRIN COMPOSITION L3 => s lactoferrin 26082 LACTOFERRIN => s 14 and (reduce vascular inflammation?) 0 L4 AND (REDUCE VASCULAR INFLAMMATION?) => s heart disease and 14 25 HEART DISEASE AND L4 => d l6 ti abs ibib tot ANSWER 1 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN L6 Bovine lactoferrin reduces plasma triacylglycerol and NEFA TIaccompanied by decreased hepatic cholesterol and triacylglycerol contents AΒ In the present study we examined whether oral administration of bovine lactoferrin (bLF) reduces plasma or hepatic triacylglycerol and cholesterol in mice. When bLF mixed with a standard commercial diet (10 g/kg) was given to mice for 4 weeks, plasma triacylglycerol and NEFA decreased, while plasma HDL-cholesterol levels increased (P 0.01). These changes in plasma lipid profiles were accompanied by significant decreases in hepátic cholesterol and triacylglycerol contents. When mice were fed a high-fat diet containing 300.0 g lard, 10.0 g cholesterol and 2.5 g bovine bile powder/kg for 4 weeks, bovine LF did not have any significant effects on plasma or hepatic cholesterol and triacylglycerol concentrations. Furthermore, bLF had no significant effects on faecal excretion of total bile acids in mice. Interestingly, bLF showed a suppressive effect on the lymphatic triacylglycerol absorption in chronically treated rats. We conclude that bLF has a beneficial effect on plasma cholesterol levels and retards hepatic lipid accumulation in mice fed a standard diet. 2004:402668 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV200400403547 TITLE: Bovine lactoferrin reduces plasma triacylglycerol

and NEFA accompanied by decreased hepatic cholesterol and

triacylglycerol contents in rodents.

AUTHOR(S): Takeuchi, Takashi; Shimizu, Hirohiko; Ando, Kunio; Harada,

Etsumori [Reprint Author]

CORPORATE SOURCE: Fac AgrDept Vet Physiol, Tottori Univ, Tottori, 6800945,

Japan

harada@muses.tottori-u.ac.jp

SOURCE: British Journal of Nutrition, (April 2004) Vol. 91, No. 4,

pp. 533-538. print.

CODEN: BJNUAV. ISSN: 0007-1145.

DOCUMENT TYPE:

Article English

LANGUAGE: English
ENTRY DATE: Entered STN: 20 Oct 2004

Last Updated on STN: 20 Oct 2004

L6 ANSWER 2 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN Leucocyte depletion in cardiopulmonary bypass: A comparison of four

AB Leucocytes have been shown to play a fundamental role in the pathophysiology of inflammation. This prospective, randomized, controlled study was designed to identify the most advantageous leucocyte depletion technique in terms of reduction in systemic inflammatory response syndrome and myocardial ischaemia reperfusion injury associated with cardiopulmonary bypass (CPB). Forty consecutive patients undergoing elective coronary artery bypass graft (CABG) surgery were randomly allocated to one of four groups. The four groups consisted of a control group, a systemic leucocyte depletion (SLD) group, a cardioplegic leucocyte depletion (CLD) group and a total leucocyte depletion (TLD) group. There were 10 patients in each group. Lactoferrin (marker of neutrophil activation) and troponin-I (marker of myocardial)

ischaemia reperfusion injury) were measured at six time points: post induction, 5 min on CPB, 5 min before releasing the aortic crossclamp, 15 min after releasing the clamp and 1 and 24 hours after the discontinuation of CPB. Plasma lactoferrin levels increased rapidly in every group after the commencement of CPB, subsequently reached a peak after releasing the aortic crossclamp and gradually declined after the discontinuation of CPB. The lowest lactoferrin concentration was observed in the TLD (range 2.15-141.9 ng/mL) and CLD groups (7.469-114.6 ng/mL). Regarding myocardial injury, plasma cardiac troponin-I levels did not differ significantly between groups; but troponin-I concentrations rose dramatically after releasing the aortic crossclamp in all groups. Nevertheless, the CLD group had the lowest troponin-I level (1.37-5.55 ng/mL). In conclusion, it is believed that myocardial ischaemia is probably a major contributor to the inflammatory response. Although there is no clear statistical significance shown in this pilot study, the data tend to support the cardioplegic leucocyte depletion strategy as the optimal method for attenuating neutrophil activation and myocardial ischaemia reperfusion injury.

ACCESSION NUMBER: 2003:396640 BIOSIS DOCUMENT NUMBER: PREV200300396640

TITLE: Leucocyte depletion in cardiopulmonary bypass: A comparison

of four strategies.

AUTHOR(S): Samankatiwat, Piya [Reprint Author]; Samartzis, Ioannis;

Lertsithichai, Panuwat; Stefanou, Demetrios; Punjabi,

Prakash P.; Taylor, Kenneth M.; Gourlay, Terence

CORPORATE SOURCE: Department of Surgery, Faculty of Medicine, Mahidol

University, Ramathibodi Hospital, Bangkok, Thailand

SOURCE: Perfusion (London), (April 2003) Vol. 18, No. 2, pp.

95-105. print.

ISSN: 0267-6591 (ISSN print).

DOCUMENT TYPE:

Article English

LANGUAGE: ENTRY DATE:

Entered STN: 27 Aug 2003

Last Updated on STN: 27 Aug 2003

L6 ANSWER 3 OF 25 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN C-reactive protein and outcomes in unstable angina: Relationship to other markers of inflammation, vascular perturbation and necrosis.

ACCESSION NUMBER: 20

2001:369213 BIOSIS PREV200100369213

DOCUMENT NUMBER:

TITLE:

C-reactive protein and outcomes in unstable angina:

Relationship to other markers of inflammation, vascular

perturbation and necrosis.

AUTHOR(S): Van Lente, F. [Reprint author]

CORPORATE SOURCE: Cleveland Clinic Foundation, Cleveland, OH, USA

SOURCE: Clinical Chemistry, (June, 2001) Vol. 47, No. S6, pp. A144.

print.

Meeting Info.: 53rd Annual Meeting of the AACC/CSCC. Chicago, Illinois, USA. July 29-August 02, 2001. American

Association for Clinical Chemistry. CODEN: CLCHAU. ISSN: 0009-9147.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 2 Aug 2001

Last Updated on STN: 19 Feb 2002

L6 ANSWER 4 OF 25 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Composition for supplementing nutritional deficiencies comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc, and copper.

AN 2004-634381 [61] WPIDS

CR 2004-440316 [41]

AB US2004166175 A UPAB: 20040923

NOVELTY - Composition for supplementing nutritional deficiencies (I) comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc and copper.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a

composition (II) comprising (mg) calcium (less than 160, preferably 90 - 110 mg), iron (more than 20, preferably 58.5 - 71.5) and copper (1.8 - 2.2).

ACTIVITY - Anabolic.

A study was undertaken to evaluate the effectiveness of the composition of the present invention in the treatment of patients. The objective of the study is to determine whether oral intake of the composition results in an improvement of the nutritional status of a patient in a physiologically stressful state. A double-blind, placebo controlled study was conducted over a six-month period. A total of 120 subjects (60 pregnant women entering the second trimester of pregnancy and 60 lactating women), aged 20 - 35 years, were chosen for the study. An initial assessment of the nutritional status of each woman was conducted utilizing methods such as the peroxide hemolysis test to assess Vitamin E deficiency, measurement of erythrocyte transketolase activity to determine thiamine levels, determination of erythrocyte glutathione reductase activity to assess riboflavin status, and high performance liquid chromatography to directly measure pyridoxine levels. The 120 subjects were separated into four separate groups of 30 women. In a first group comprising only pregnant women and in a second group comprising only lactating women, each subject was administered 2 caplets, daily, of (A1). In a third group comprising only pregnant women and in a fourth group comprising only lactating women, each subject was administered 2 placebo caplets, daily. No other nutritional supplements were taken by the subjects during the assessment period. An assessment of the nutritional status of each woman was conducted utilizing methods such as the peroxide hemolysis test to assess vitamin E deficiency, measurement of erythrocyte transketolase activity to determine thiamine levels, determination of erythrocyte glutathione reductase activity to assess riboflavin status, and high performance liquid chromatography to directly measure pyridoxine levels at one month intervals for a six month period. The data was evaluated using multiple linear regression analysis and a standard t-test. A statistically significant improvement in the nutritional status with respect to vitamin E, thiamine, riboflavin, and pyridoxine was observed in the treated subjects upon completion of the study over the controls.

MECHANISM OF ACTION - None given.

USE - For supplementing nutritional deficiencies to a patient (particularly a pregnant patient or a lactating patient) who is in a stressful state e.g. a disease state such as pulmonary disorder, a hematological/oncological disorder, a cancer, a disorder of the immune system, a cardiovascular disorder, a hepatic/biliary disorder, a disorder associated with pregnant females and a disorder associated with a fetus. The nutritional deficiencies are a result of elevated metabolic demand, increased plasma volume, decreased concentrations of nutrient-binding proteins (e.g. serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein Al, folic acid binding protein, and 25-hydroxyvitamin D binding protein) (all claimed). The disorders associated with pregnant females include osteomalacia and pre-eclampsia and disorders associated with the fetus include neural tube defects and various fetal abnormalities. The pulmonary disorder includes bronchitis, bronchiectasis, atelectasis, pneumonia, diseases caused by inorganic dusts, diseases caused by organic dusts, pulmonary fibrosis and pleurisy. The hematological/oncological disorder includes anemia, hemophilia, leukemia and lymphoma. The disorder of the immune system includes AIDS, AIDS-related complex and bacterial infection. The cardiovascular disorder includes arterial hypertension, orthostatic hypotension, arteriosclerosis, coronary artery disease, cardiomyopathy, arrhythmia, valvular heart disease, endocarditis, pericardial disease, cardiac tumor, aneurysm and peripheral vascular disorder. The hepatic/biliary disorder includes jaundice, hepatic steatosis, fibrosis, cirrhosis, hepatitis, hepatic granuloma, liver tumor, cholelithiasis, cholecystitis and choledocholithiasis.

ADVANTAGE - The compositions optimize good health, provide protection against poor nutrition and disease, provide specific nutrients before, during, and after the physiological processes of pregnancy or lactation, which has a profound, positive and comprehensive impact upon the overall

wellness of the developing and newborn child as well as the safety and health of the mother.

Dwg.0/0

ACCESSION NUMBER: 2004-634381 [61] WPIDS

CROSS REFERENCE: 2004-440316 [41] DOC. NO. CPI: C2004-227792

TITLE: Composition for supplementing nutritional deficiencies

comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc, and copper.

DERWENT CLASS: B04 B05 D13

INVENTOR(S): BALZER, C; GIORDANO, J A

PATENT ASSIGNEE(S): (BALZ-I) BALZER C; (GIOR-I) GIORDANO J A

COUNTRY COUNT:

PATENT INFORMATION:

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE | | |
|---------------|------|----------------|----------|--|--|
| US 2004166175 | | US 2002-315159 | 20021210 | | |

PRIORITY APPLN. INFO: US 2002-315159 20021210; US 2004-790027 20040302

WPIDS

L6 ANSWER 5 OF 25 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
TI Composition useful for supplementing nutritional deficiencies comprises
vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron,

magnesium, zinc and copper.

AN 2004-440316 [41] CR 2004-634381 [61]

AB US2004109901 A UPAB: 20041117

NOVELTY - A composition (C1) comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc and copper.

ACTIVITY - Respiratory-Gen.; Cytostatic; Antiinflammatory; Hepatotropic; Virucide; Vasotropic; Cardiant; Antiarrhythmic; Cardiovascular-Gen.; Antiarteriosclerotic; Hypertensive; Hypotensive; Anti-HIV; Hemostatic; Antianemic; Gynecological.

MECHANISM OF ACTION - None given.

USE - For supplementing nutritional deficiencies in a patient throughout the stressful states resulting from pregnancy, lactation, elevated metabolic demand, increased plasma volume, decreased concentrations of nutrient-binding proteins (e.g. serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein A1, folic acid binding protein and 25-hydroxyvitamin D binding protein) and any disease state (e.g. pulmonary disorder, hematological/oncological disorder, cancer, immune system disorder, cardiovascular disorder, hepatic/biliary disorder and disorder associated with pregnant females and fetus) (all claimed). Also useful for treating osteomalacia, pre-eclampsia, bronchitis, bronchiectasis, atelectasis, pneumonia, diseases caused by inorganic dusts, organic dusts, pulmonary fibrosis, pleurisy, anemia, hemophilia, leukemia, lymphoma, AIDS, HIV, arterial hypertension, orthostatic hypotension, arteriosclerosis, coronary artery disease, cardiomyopathy, arrhythmia, valvular heart disease, endocarditis, pericardial disease, cardiac tumor, aneurysm, peripheral vascular disorder, jaundice, hepatic steatosis, fibrosis, cirrhosis, hepatitis, hepatic granuloma, liver tumor, cholelithiasis, cholecystitis and choledocholithiasis.

ADVANTAGE - The composition provides nutritional supplement by preventing dietary deficiencies, and also protects against the development of disease.

Dwq.0/0

ACCESSION NUMBER:

2004-440316 [41] WPIDS

CROSS REFERENCE:

2004-634381 [61]

C2004-164922

DOC. NO. CPI: TITLE:

Composition useful for supplementing nutritional

deficiencies comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc and

copper.

DERWENT CLASS:

B05 D13

INVENTOR(S):

BALZER, C; GIORDANO, J A; GIORDANO, J

PATENT ASSIGNEE(S):

(BALZ-I) BALZER C; (GIOR-I) GIORDANO J A; (EVER-N)

EVERETT LAB INC

COUNTRY COUNT:

107

PATENT INFORMATION:

| PATENT NO | KII | ND DATE | WEEK | LA | PG |
|--------------------------------|-----|---------|-----------------------|----|----|
| US 2004109901 WO 2004052295 | | | (200441)* (200441) | | 12 |

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE
LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM
PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ
VC VN YU ZA ZM ZW

AU 2003296357 Al 20040630 (200472) US 6814983 B2 20041109 (200474)

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|-----------------|----------|
| US 2004109901 | A1 | US 2002-315159 | 20021210 |
| WO 2004052295 | A2 | WO 2003-US39022 | 20031209 |
| AU 2003296357 | A1 | AU 2003-296357 | 20031209 |
| US 6814983 | B2 | US 2002-315159 | 20021210 |

FILING DETAILS:

| PATENT N | io k | KIND | | P | ATENT | ИО |
|----------|---------|--------------|------|--------------|--------|------|
| | | - | | - | | |
| AU 20032 | 96357 A | Al Based | on 1 | OW | 200405 | 2295 |

PRIORITY APPLN. INFO: US 2002-315159 20021210

L6 ANSWER 6 OF 25 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN Use of human apo-lactoferrin and peptides derivable from human lactoferrin for the production of composition useful for e.g. treating and preventing vascular disease.

AN 2003-712670 [67] WPIDS

AB WO2003072129 A UPAB: 20031017

NOVELTY - In the production of a composition, a substance containing human apo-lactoferrin and/or peptides derivable from human lactoferrin and/or its natural metabolites or equivalent analogs is used.

ACTIVITY - Antianginal; Cerebroprotective; Cardiant; Antiulcer; Antialopecia.

MECHANISM OF ACTION - VEGF165 induced angiogenesis inhibitor.

Lactoferrin, dissolved in saline, was given by tube feeding twice daily from Sunday afternoon (Day-1) to Friday afternoon (Day 4). Vehicle controls received saline by tube feeding. The angiogenesis treatment with VEGF was given intraperitoneally on Days 0 - 4 (twice daily). The results for test/control groups were vascularized area = 12.09 plus or minus 1.49/1.18 plus or minus 0.5, microvascular length = 1.465 plus or minus 0.077/0.28 plus or minus 0.04, and total microvascular length = 17.72 plus or minus 2.19/0.33 plus or minus 0.14 respectively. The results demonstrated that oral administration of apo-hLE significantly

enhanced the VEGF mediated angiogenic response.

USE - For treating and/or preventing vascular disease and/or states of tissue hypoperfusion (including impending or manifested stroke,

ischemic heart disease e.g. angina pectoris or

impending or manifested myocardial infarction), or peripheral artery occlusive disease with or without impending gangrene and/or state of depressed VEGF induced angiogenesis associated with peptic ulcer, leg ulcer or local or generalized hair loss) with hypoxia and/or ischemic consequences (claimed).

ADVANTAGE - The method is used in as an alternative to bypass surgery or any therapeutic angiogenesis options.

Dwg.0/0

ACCESSION NUMBER: 2003-712670 [67]

DOC. NO. CPI: C2003-196034

Use of human apo-lactoferrin and peptides TITLE:

derivable from human lactoferrin for the

production of composition useful for e.g. treating and

preventing vascular disease.

DERWENT CLASS: B04

INVENTOR(S): NORRBY, K

PATENT ASSIGNEE(S): (NORR-I) NORRBY K

COUNTRY COUNT:

29

PATENT INFORMATION:

KIND DATE PATENT NO WEEK WO 2003072129 A1 20030904 (200367) * EN 14

RW: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE

SI SK TR

W: AU JP US

AU 2003210086 Al 20030909 (200428)

A1 20041124 (200477) EP 1478387 EN

R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT

SE SI SK TR

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|----------------|----------|
| WO 2003072129 | A1 | WO 2003-SE329 | 20030227 |
| AU 2003210086 | A1 | AU 2003-210086 | 20030227 |
| EP 1478387 | A1 | EP 2003-743090 | 20030227 |
| | | WO 2003-SE329 | 20030227 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2003210086 | Al Based on | WO 2003072129 |
| EP 1478387 | Al Based on | WO 2003072129 |

PRIORITY APPLN. INFO: SE 2002-598 20020227

1.6 ANSWER 7 OF 25 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN ΤI

Use of human apo-lactoferrin and peptides derivable from human lactoferrin for the production of composition useful for e.g.

treating and preventing vascular disease;

human apo-lactoferrin for use in disease therapy

AN 2003-25156 BIOTECHDS

DERWENT ABSTRACT: AB

NOVELTY - In the production of a composition, a substance containing human apo-lactoferrin and/or peptides derivable from human lactoferrin and/or its natural metabolites or equivalent analogs is used.

ACTIVITY - Antianginal; Cerebroprotective; Cardiant; Antiulcer; Antialopecia.

MECHANISM OF ACTION - VEGF165 induced angiogenesis inhibitor. Lactoferrin, dissolved in saline, was given by tube feeding twice

daily from Sunday afternoon (Day-1) to Friday afternoon (Day 4). Vehicle controls received saline by tube feeding. The angiogenesis treatment with VEGF was given intraperitoneally on Days 0 - 4 (twice daily). The results for test/control groups were vascularized area = 12.09+/-1.49/1.18+/-0.5, microvascular length = 1.465+/-0.077/0.28+/-0.04, and total microvascular length = 17.72+/-2.19/0.33+/-0.14 respectively. The results demonstrated that oral administration of apo-hLE significantly enhanced the VEGF mediated angiogenic response.

USE - For treating and/or preventing vascular disease and/or states of tissue hypoperfusion (including impending or manifested stroke, ischemic heart disease e.g. angina pectoris or impending or manifested myocardial infarction), or peripheral artery occlusive disease with or without impending gangrene and/or state of depressed VEGF induced angiogenesis associated with peptic ulcer, leg ulcer or local or generalized hair loss) with hypoxia and/or ischemic consequences (claimed).

ADMINISTRATION - The route of administration is oral, parenteral, local or by inhalation. No dosage given.

ADVANTAGE - The method is used in as an alternative to bypass surgery or any therapeutic angiogenesis options.

EXAMPLE - No relevant example given. (14 pages)

ACCESSION NUMBER: 2003-25156 BIOTECHDS

TITLE: Use of human apo-lactoferrin and peptides derivable

from human lactoferrin for the production of

composition useful for e.g. treating and preventing vascular

disease;

human apo-lactoferrin for use in disease therapy

AUTHOR: NORRBY K
PATENT ASSIGNEE: NORRBY K

PATENT INFO: WO 2003072129 4 Sep 2003 APPLICATION INFO: WO 2003-SE329 27 Feb 2003

PRIORITY INFO: SE 2002-598 27 Feb 2002; SE 2002-598 27 Feb 2002

DOCUMENT TYPE: Patent LANGUAGE: English

AΒ

OTHER SOURCE: WPI: 2003-712670 [67]

L6 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Pharmaceutical composition for treatment of vascular disease or states of tissue hypoperfusion with hypoxic and/or ischemic consequences

Disclosed is the use of a substance selected from the group consisting of human apolactoferrin and/or peptides derivable from human

lactoferrin and/or natural metabolites of human

lactoferrin and/or functionally equivalent analogs of human apolactoferrin for the production of a pharmaceutical composition for treatment and/or prevention of a vascular disease and/or states of tissue hypoperfusion with hypoxic and/or ischemic consequences. Thus, oral or s.c. administration of apolactoferrin specifically enhanced the VEGF-mediated angiogenesis.

ACCESSION NUMBER: 2003:696760 HCAPLUS

DOCUMENT NUMBER: 139:219356

TITLE: Pharmaceutical composition for treatment of vascular

disease or states of tissue hypoperfusion with hypoxic

and/or ischemic consequences

INVENTOR(S): Norrby, Klas

PATENT ASSIGNEE(S): Swed.

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Pat LANGUAGE: Eng

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

W: AU, JP, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IT, LU, MC, NL, PT, SE, SI, SK, TR

EP 1478387 A1 20041124 EP 2003-743090 20030227 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, FI, CY, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: SE 2002-598 A 20020227

WO 2003-SE329 W 20030227

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

TI New ingredients from dairy foods

AB Dairy foods have traditionally been considered a source of nutrition, particularly high quality protein, calcium and other minerals, and vitamins. In the last few decades, milk and other dairy foods have been maligned due to their saturated fat and cholesterol contents and the belief that these constituents increase the risk of coronary heart disease. There are several studies, which indicate that dairy products may not potentiate atherosclerosis. In fact there are factors in milk that may actively protect against heart disease such as calcium, bioactive peptides, folic acid, vitamin B6, vitamin B12 and conjugated linoleic acid. A range of other activities has been demonstrated for dairy components. Milk proteins are an important source of bioactive peptides showing opioid and ACE-inhibitory activity. Lactoferrin has been shown to have a bifidus effect and antimicrobial activity. It also improves iron bioavailability. Glycomacropeptide, a-lactoglobulin, a-lactalbumin and casein phosphopeptides affect physiol. functions. The development of membrane technologies allows the fractionation of milk proteins to produce a range of products with potential impact on human health.

ACCESSION NUMBER: 2002:613228 HCAPLUS

TITLE: New ingredients from dairy foods

AUTHOR(S): Morgan, Wendy

CORPORATE SOURCE: N/A, North Sydney, NSW 2059, Australia

SOURCE: Abstracts of Papers, 224th ACS National Meeting,

Boston, MA, United States, August 18-22, 2002 (2002), AGFD-041. American Chemical Society: Washington, D.

C.

CODEN: 69CZPZ

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

L6 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Formulations of tocopherols and methods of making and using them

Non-naturally-occurring compns. for use in amelioration of disruption of AΒ energy metabolism secondary to stress are described. The compns. comprise a tocopherol and/or a derivative thereof, and a synergist, and are particularly suited for use as nutritional supplements. Synergists include, but are not limited to, flavonoids and lactoferrin and/or derivs. thereof. Compns. comprising an optimized formulation comprising a tocopherol and an addnl. compound such as daidzein or biochanin A are also described. Methods of making these compns. and methods of ameliorating injury(ies) or disruption of energy metabolism secondary to stress, comprising administering such compns., are also disclosed. Various concns. of tocopherols and flavonoids were tested in vitro for the combined ability to ameliorate disruption of energy metabolism secondary to stress. example, diosmin $(3.3-100 \mu M)$ was not protective by itself, but was synergistic in that range with 10 $\mu g/mL$ (±)- α -tocopherol, a concentration at which (\pm) - α -tocopherol was only slightly (about 15%) protective by itself. The combination of 100 μM diosmin and 100 $\mu g/mL$ (±)- α -tocopherol greatly reduced cell death, providing about 70% protection against stress-induced cell death, indicating synergism between these components. A combinations of 100 μM diosmin and 11 μ g/mL (\pm)- α -tocopherol was also synergistic.

ACCESSION NUMBER: 2002:570708 HCAPLUS

DOCUMENT NUMBER: 137:119700

TITLE: Formulations of tocopherols and methods of making and

using them

INVENTOR(S): Miller, Guy; Brown, Lesley A. PATENT ASSIGNEE(S): Galileo Laboratories, Inc., USA

SOURCE:

U.S., 28 pp.

DOCUMENT TYPE:

CODEN: USXXAM Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|--------------|---------------------|-------------------|
| | | | | |
| US 6426362 | B1 | 20020730 | US 2000-684588 | 20001006 |
| US 2003022818 | A1 | 20030130 | US 2002-188587 | 20020702 |
| PRIORITY APPLN. INFO.: | | | US 1999-158234P | P 19991008 |
| | | | US 2000-684588 | A1 20001006 |
| REFERENCE COUNT: | 95 | THERE ARE 95 | CITED REFERENCES A | VAILABLE FOR THIS |
| • | | RECORD. ALL | CITATIONS AVAILABLE | IN THE RE FORMAT |

L6 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Antitumor and anti-inflammatory properties of human lactoferrin and variants thereof

AB The invention provides compns. containing human lactoferrin, or lactoferrin variants deleted for one or more arginine residues in the amino-terminal region of the protein (i.e., in the first basic cluster), and methods of using the compns. The human lactoferrin, or lactoferrin variants, are useful for treatment of human diseases and conditions, including inflammation.

ACCESSION NUMBER: 1998:542975 HCAPLUS

DOCUMENT NUMBER: 129:166197

JOCOMENT NOMBER. 125.100157

TITLE: Antitumor and anti-inflammatory properties of human

lactoferrin and variants thereof

INVENTOR(S): Nuijens, Jan; Van Berkel, Patrick H. C.

PATENT ASSIGNEE(S): Pharming B.V., Neth. SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | rent 1 | NO. | | | KIN | | DATE | | j | APPL | ICAT | ION I | . 01 | | D. | ATE | |
|----------|--------------|--|--|--|--|--|--|--|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-------------------------|
| | 9833 9833 | | | | A2 | | | | 1 | WO 1 | 998- | IB44 | 1 | | 1 | 99802 | 202 |
| | W : | AL, DK, KP, NO, UA, GH, | AM, EE, KR, NZ, UG, GM, | AT, ES, KZ, PL, US, KE, | AU, FI, LC, PT, UZ, LS, | AZ, GB, LK, RO, VN, MW, | BA, GE, LR, RU, YU, SD, | BB, GH, LS, SD, ZW, SZ, | GM, LT, SE, AM, UG, | GW, LU, SG, AZ, ZW, | BY, HU, LV, SI, BY, | ID, MD, SK, KG, BE, | IL, MG, SL, KZ, CH, | IS, MK, TJ, MD, DE, | JP, MN, TM, RU, DK, | KE, MW, TR, TJ, ES, | KG, MX, TT, TM |
| | | • | • | • | • | • | LU, SN, | • | | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, |
| | 9863 | | | | | | | | | | | | | | | | |
| EP | 1017 | | | | | | | | | | | | | | | | |
| | R: | AT, IE, | • | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | 63333 | | | | | | | | 1 | JS 1 | 998-3 | 17043 | 3 | | 1: | 99802 | 202 |
| JP | 2002 | 51589 | 93 | | T2 | | 2002 | 0528 | | JP 1 | 998- | 5326 | 79 | | 1: | 99802 | 202 |
| PRIORITY | APP | LN. | INFO | . : | | | | | Ţ | JS 1 | 997-3 | 36859 | PΡ | 1 | 2 1: | 99702 | 203 |
| | | | | | | | | | | | 998-1 998-1 | | | | | 99802 99802 | |

L6 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2005 ACS on STN

TI The erythrocyte as instigator of inflammation. Generation of amidated C3 by erythrocyte adenosine deaminase

AB Myocardial ischemia is characterized by the liberation of adenosine and by complement-mediated inflammation. The authors have reported that amidated complement C3, formed when ammonia disrupts the thiolester bond of C3, serves as an alternative pathway convertase, generates C5b-9, and stimulates phagocytic oxidative metabolism Here, it was investigated whether

the deamination of adenosine by adenosine deaminase in hematopoietic cells might liberate sufficient ammonia to form amidated C3 and thereby trigger complement-mediated inflammation at ischemic sites. In the presence of 4 mM adenosine, NH3 production per erythrocyte (RBC) was equal to that per neutrophil (PMN). Because RBC outnumber PMN in normal blood by a thousand-fold, RBC are the major source of NH3 production in the presence of adenosine. NH3 production derived only from the deamination of adenosine by the enzyme adenosine deaminase and was abolished by $0.4~\mu M$ 2'-deoxy-coformycin, a specific inhibitor of adenosine deaminase. purified human C3 was incubated with 5 + 108 human RBC in the presence of adenosine, disruption of the C3 thiolester increased more than two-fold over that measd. in C3 incubated with buffer, or in C3 incubated with RBC. The formation of amidated C3 was abolished by the preincubation of RBC with 2'-deoxycoformycin. Amidated C3 elicited release of superoxide, myeloperoxidase, and lactoferrin from PMN. Thus, the formation of amidated C3 by RBC deamination of adenosine triggers a cascade of complement-mediated inflammatory reactions.

ACCESSION NUMBER:

1989:532298 HCAPLUS

DOCUMENT NUMBER:

111:132298

TITLE:

The erythrocyte as instigator of inflammation. Generation of amidated C3 by erythrocyte adenosine

deaminase

AUTHOR (S):

Hostetter Margaret K.; Johnson, George M.

CORPORATE SOURCE:

Med. Sch., Univ. Minnesota, Minneapolis, MN, 55455,

USA

SOURCE:

L6

AΒ

Journal of Clinical Investigation (1989), 84(2),

665-71

CODEN: JCINAO; ISSN: 0021-9738

DOCUMENT TYPE:

Journal English

LANGUAGE:

ANSWER 13 OF 25 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Phenolics, their antioxidant and antimicrobial activity in dark germinated fenugreek sprouts in response to peptide and phytochemical elicitors

The phenylpropanoid pathway (PPP) was stimulated in fenugreek sprouts through the pentose phosphate and shikimate pathway, by natural elicitors such as Fish Protein Hydrolysates (FPH), Lactoferrin (LF) and Oregano Extract (OE). Among treatments 0.5 ml/L FPH elicited fenugreek sprouts had the highest phenolic content of 0.75 mg/g FW on day 3 of germination which was approximately 25% higher than control on the same day. The antioxidant activity estimated by beta-carotene assay was highest for LF and OE elicited sprouts on day 2 and 4, respectively with an antioxidant protection factor (APF) of 1.47 for both. In all treatments and control, higher antioxidant activity was observed during early germination, which correlates to higher phenolic content, suggesting that initially phenolics are antioxidant in nature. This increased activity also correlates with high guaiacol peroxidase (GPX) activity indicating that the polymerized phenolics required for lignification with growth have antioxidant function. The antioxidant activity as estimated by beta-carotene and 1,1,-diphenyl-2-picryl hydrazyl (DPPH) assays indicate that fenugreek sprout extract can quench the superoxide free radical and also possibly scavenge the hydrogen peroxide generated in the reaction mix. OE elicited the highest levo dihydroxy phenylalanine (L-DOPA) synthesis of 1.59 mg/g FW, followed by FPH with 1.56 mg/g FW and LF 1.5 mg/g FW all on day 2 which was 24.5%, 23% and 20% higher than control, respectively. Higher L-DOPA content was observed in the elicited fenugreek sprouts during early germination, correlating to high phenolics and antioxidant activity, suggesting that L-DOPA also contributes to the high antioxidant activity. The glucose-6-phosphate dehydrogenase (G6PDH) activity was higher during early germination (day 1-4) and gradually decreased during later stages (day 5-8) for all treatments and control. The early increase is possibly due to the carbohydrate mobilization from the cotyledons directed towards the high nutrient requirements of the growing sprout. As mobilization occurred, an allosteric feedback inhibition by sugar-phosphates is suggested, as lower G6PDH activity was observed on days 6-8. The elevated levels of GPX during early germination coincide with the higher phenolic synthesis; SOD activity and antioxidant

activity suggests the elevated production and quenching of reactive oxygen species by elicitation. High antimicrobial activity against peptic ulcer-linked Helicobacter pylori was observed in the fenugreek sprout extract from control and LF treatments only. We hypothesized that in fenugreek sprouts, simple free phenolics that are less polymerized have more antimicrobial function.

2004:873382 SCISEARCH ACCESSION NUMBER:

THE GENUINE ARTICLE: 859EW

Phenolics, their antioxidant and antimicrobial activity in TITLE:

dark germinated fenugreek sprouts in response to peptide

and phytochemical elicitors

Randhir R; Lin Y T; Shetty K (Reprint) AUTHOR:

Univ Massachusetts, Chenoweth Lab, Dept Food Sci, Amherst,

MA 01003 USA (Reprint)

COUNTRY OF AUTHOR:

CORPORATE SOURCE:

ASIA PACIFIC JOURNAL OF CLINICAL NUTRITION, (SEP-OCT 2004) SOURCE:

Vol. 13, No. 3, pp. 295-307.

Publisher: H E C PRESS, HEALTHY EATING CLUB PTY LTD,

EMERALD HILL CLINIC 157 CLARENDON ST, SOUTHBANK, VIC 3006,

AUSTRALIA.

ISSN: 0964-7058. Article; Journal

DOCUMENT TYPE: LANGUAGE:

AB

REFERENCE COUNT:

English

60

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

ANSWER 14 OF 25 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on 1.6 STN

ТT Elimination of proinflammatory cytokines in pediatric cardiac surgery: Analysis of ultrafiltration method and filter type

Objective: This study was undertaken to assess whether different filter types or ultrafiltration methods influence inflammatory markers in pediatric cardiac surgery.

Methods: Forty-one children younger than 5 years were prospectively randomized to groups A (polyamid filter with conventional ultrafiltration), B (polyamid filter with modified ultrafiltration), C (polysulfon filter with conventional ultrafiltration), and ${\tt D}$ (polysulfon filter with modified ultrafiltration). Interleukin 6, interleukin 10, tumor necrosis factor, terminal complement complex, and lactoferrin were measured before the operation (TO), before rewarming (T1), after ultrafiltration (T2), at 6 (T3) and 18 hours (T4) after the operation, and in the ultrafiltrate.

Results: All markers changed with both ultrafiltration methods, both filter types, and in all groups (except tumor necrosis factor) along the TO to T4 observation time (P < .0001). Their patterns of changes were different for terminal complement complex, with less decrease after use of the polysulfon filter (P < .05), and among groups A through D for interleukin 6 (P = .01), with more decrease in group C than group A (P < .01) .02). Interleukin 10 decreased with the polyamid filter (P < .001) but not with the polysulfon filter. In the ultrafiltrate, tumor necrosis factor was higher with the polysulfon filter than the polyamid filter (6.8 \pm -/- 5 pg/mL vs 4.0 +/- 3.7 pg/mL, P < .05). The ultrafiltrate/plasma ratio of interleukin 6 was higher with conventional ultrafiltration than modified ultrafiltration (0.018 +/- 0.017 vs 0.004 +/- 0.007, P < .005).

Conclusions: The polysulfon filter showed a filtration profile for inflammatory mediators superior to that of the polyamid filter for interleukin 6, tumor necrosis factor, and interleukin 10. Interleukin 6 was most efficiently removed by conventional ultrafiltration with a polysulfon filter, and tumor necrosis factor was best removed by modified ultrafiltration with a polysulfon filter, whereas other inflammatory mediators were not influenced by filter type or ultrafiltration method. Therefore combined conventional and modified ultrafiltration with a polysulfon filter may currently be the most effective strategy for removing inflammatory mediators in pediatric heart surgery.

ACCESSION NUMBER: 2004:558616 SCISEARCH

THE GENUINE ARTICLE: 827JN

TITLE: Elimination of proinflammatory cytokines in pediatric cardiac surgery: Analysis of ultrafiltration method and filter type

Berdat P A (Reprint); Eichenberger E; Ebell J; Pfammatter AUTHOR:

J P; Pavlovic M; Zobrist C; Gygax E; Nydegger U; Carrel T

Univ Hosp Bern, Swiss Cardiovasc Ctr Berne, Cardiovasc CORPORATE SOURCE:

Surg Clin, CH-3010 Bern, Switzerland (Reprint); Univ Hosp Bern, Div Pediat Cardiol, CH-3010 Bern, Switzerland; Univ

Hosp Bern, Div Cardiovasc Anesthesiol, CH-3010 Bern,

Switzerland

COUNTRY OF AUTHOR:

Switzerland

SOURCE:

JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY, (JUN 2004)

Vol. 127, No. 6, pp. 1688-1696.

Publisher: MOSBY, INC, 11830 WESTLINE INDUSTRIAL DR, ST

LOUIS, MO 63146-3318 USA.

ISSN: 0022-5223.

DOCUMENT TYPE:

Article; Journal

LANGUAGE:

ΤI

AΒ

English

REFERENCE COUNT: 25

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L6 ANSWER 15 OF 25 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on

Neutrophil activation and C-reactive protein concentration in preeclampsia Preeclamptic pregnancies seem to be associated with a higher extent of inflammation compared with normal ones. We intended to test this proposal and also to clarify the contribution of some variables in such inflammatory process. We measured total and differential leukocyte count, serum C-reactive protein (CRP), and plasma levels of lactoferrin

, elastase, and granulocyte-macrophage colony-stimulating factor (GMCSF). Uric acid was also evaluated and used as an indicator of the severity of the disease. A cross-sectional study was performed by evaluating healthy and preeclamptic women in the third trimester of gestation (n = 67 and n = 6751, respectively) and 24 to 48 h postpartum (n = 32 and n = 26, respectively). When comparing the third trimester of normal and preeclamptic pregnancies, we found significantly higher levels of uric acid, CRP, and elastase, and a significantly higher elastase to neutrophil ratio in the pathologic group. However, for CRP, statistical significance was lost after adjustment for maternal weight. No significant differences were found in total leukocyte count, plasma levels of GM-CSF, and

lactoferrin between groups. In preeclampsia, a significant positive correlation was found between elastase and lactoferrin and these neutrophil activation products correlated positively with uric acid level. Considering the analysis of all variables in the postpartum period, only CRP and uric acid levels were significantly elevated in the pathologic group. However, CRP differences obtained in the puerperium seem to be influenced by the increased number of dystocic deliveries in the preeclamptic group. In conclusion, our data suggest that inflammation is further pronounced in preeclampsia and that the extent of neutrophil activation correlates with the severity of this syndrome.

2003:606328 SCISEARCH ACCESSION NUMBER:

THE GENUINE ARTICLE: 699FC

Neutrophil activation and C-reactive protein concentration TITLE:

in preeclampsia

Belo L (Reprint); Santos-Silva A; Caslake M; Cooney J; AUTHOR:

Pereira-Leite L; Quintanilha A; Rebelo I

Univ Porto, Fac Pharm, Dept Biochem, Rua Campo Alegre 823, CORPORATE SOURCE:

P-4050047 Oporto, Portugal (Reprint); Univ Porto, Fac Pharm, Dept Biochem, P-4050047 Oporto, Portugal; Univ Porto, Inst Mol & Cell Biol, P-4100 Oporto, Portugal; Univ Glasgow, Glasgow Royal Infirm, NHS Trust, Dept Pathol Biochem, Glasgow, Lanark, Scotland; Hosp Sao Joao, Porto Med Sch, Dept Obstet & Gynaecol, Oporto, Portugal; Univ

Porto, Inst Biomed Sci Abel Salazar, P-4100 Oporto,

Portugal

COUNTRY OF AUTHOR:

Portugal; Scotland

SOURCE:

HYPERTENSION IN PREGNANCY, (JUL 2003) Vol. 22, No. 2, pp.

Publisher: MARCEL DEKKER INC, 270 MADISON AVE, NEW YORK,

NY 10016 USA.

ISSN: 1064-1955. Article; Journal

DOCUMENT TYPE: Article LANGUAGE: English

REFERENCE COUNT:

AΒ

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L6 ANSWER 16 OF 25 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Improvement of long-standing iron-deficiency anemia in adults after eradication of Helicobacter pylori infection

We report two cases of long-standing iron-deficiency anemia in premenopausal women that improved after eradication of H. pylori infection. There were no ulcerations or hemorrhagic lesions in the gastrointestinal tract and no bleeding focus in gynecological organs. Both cases showed H. pylori infection in the stomach and gastric atrophy. After successful eradication of H. pylori infection, the iron-deficiency anemia in both patients dramatically improved, and neither patient suffered from anemia for about 2 years. The cure of H. pylori infection is an optional treatment for iron-deficiency anemia in one fraction of the patients.

ACCESSION NUMBER: 2002:507770 SCISEARCH

43

THE GENUINE ARTICLE: 561VJ

THE GENOINE ARTICLE: 20100

TITLE: Improvement of long-standing iron-deficiency anemia in

adults after eradication of Helicobacter pylori infection

AUTHOR: Sugiyama T (Reprint); Tsuchida M; Yokota K; Shimodan M;

Asaka M

CORPORATE SOURCE: Hokkaido Univ, Grad Sch Med, Dept Gastroenterol, Kita Ku,

Kita 15, Nishi 7, Sapporo, Hokkaido 0608638, Japan

(Reprint); Hokkaido Univ, Grad Sch Med, Dept

Gastroenterol, Kita Ku, Sapporo, Hokkaido 0608638, Japan

COUNTRY OF AUTHOR: Japan

SOURCE: INTERNAL MEDICINE, (JUN 2002) Vol. 41, No. 6, pp. 491-494.

Publisher: JAPAN SOC INTERNAL MEDICINE, 34-3 3-CHOME HONGO

BUNKYO-KU, TOKYO, 113, JAPAN.

ISSN: 0918-2918. Article; Journal

DOCUMENT TYPE: Arti

LANGUAGE: English

REFERENCE COUNT: 2

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L6 ANSWER 17 OF 25 CEN COPYRIGHT 2001 ACS on STN

TI BIG FIRMS EYE NUTRACEUTICALS

Polyunsaturated fatty acids and other nutritional ingredients are pursued

by the chemical industry's leading companies

ACCESSION NUMBER: 2000:2447 CEN

TITLE: BIG FIRMS EYE NUTRACEUTICALS

Polyunsaturated fatty acids and other nutritional

ingredients are pursued by the chemical industry's leading

companies

SOURCE: Chemical & Engineering News, (25 Sep 2000) Vol. 78, No. 39,

pp. 21.

CODEN: CENEAR, ISSN: 0009-2347.

PUBLISHER: American Chemical Society

LANGUAGE: English WORD COUNT: 2428

L6 ANSWER 18 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI CXC-chemokine stimulation of neutrophils correlates with plasma levels of myeloperoxidase and **lactoferrin** and contributes to clinical outcome after pediatric cardiac surgery.

AB Several CXC-chemokines, of which interleukin (IL)-S is the prototype, are potent neutrophil chemotactic and activating cytokines, inducing the secretion of granule proteins and the generation of reactive oxygen intermediates that may cause tissue damage and amplify inflammatory responses. Here, we investigated whether chemokines play a key role in the inflammatory process following cardiac surgery with cardiopulmonary bypass; (CPB) in children. We performed an observational prospective

clinical study of 40 pediatric patients before, during, and after open heart surgery with CPB. Plasma levels of chemokines, myeloperoxidase (MPO), and lactoferrin were measured by immunoassays. Cell surface receptors were detected by flow cytometry. Plasma levels of IL-8 were increased after CPB, correlating strongly with a reduction of expression of the CXC-chemokine receptors (CXCR) 1 and 2 on neutrophils indicating in vivo activation of neutrophils by IL-8. Other CXC-chemokines with Glu-Leu-Arg motif showed no correlation with CXCR1 or CXCR2 expression. Two components of neutrophilic granules, MPO and lactoferrin, were strongly elevated postoperatively, and the levels of both were correlated with IL-8. Levels of monocyte chemoattractant protein (MCP)-1 were increased post-operatively, correlating with a reduction of CCR2 expression and an increase of CD11b expression on monocytes, suggesting monocyte activation by MCP-1. The early postoperative course was complicated in patients with an increase of these inflammatory parameters. Impaired cardiovascular function correlated with increased levels of IL-8 and activation of neutrophils and was most prominent in patients with a long time on CPB and in those with cyanotic heart lesions. In conclusion, MCP-1 is involved in the regulation of chemotaxis and function of monocytes during and early after the end of CPB. Activation of neutrophils and down-regulation of CXCR1 and CXCR2 were predominantly caused by IL-8. This activation implies release of components of neutrophilic granules and correlates with the need for

inotropic support.

ACCESSION NUMBER: 2004515082 EMBASE

TITLE: CXC-chemokine stimulation of neutrophils correlates with

plasma levels of myeloperoxidase and lactoferrin

and contributes to clinical outcome after pediatric cardiac

surgery.

AUTHOR: Gessler P.; Pretre R.; Hohl V.; Rousson V.; Fischer J.;

Dahinden C.

CORPORATE SOURCE: Dr. P. Gessler, University Children's Hospital,

Steinwiesstrasse 75, CH 8032 Zurich, Switzerland.

peter gessler@kispi.unizh.ch Shock, (2004) 22/6 (513-520).

Refs: 40

ISSN: 1073-2322 CODEN: SAGUAI

COUNTRY: United States
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 007 Pediatrics and Pediatric Surgery

018 Cardiovascular Diseases and Cardiovascular Surgery

026 Immunology, Serology and Transplantation

029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

L6 ANSWER 19 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.

on STN

SOURCE:

TI Cellular effects of common nutraceuticals and natural food substances.

ACCESSION NUMBER: 2004053658 EMBASE

TITLE: Cellular effects of common nutraceuticals and natural food

substances.

AUTHOR: Mandelker L.; Wynn S.

CORPORATE SOURCE: L. Mandelker, Community Veterinary Hospital, 1631 W. Bay

Drive, Largo, FL 33770, United States. lestervet2@aol.com

SOURCE: Veterinary Clinics of North America - Small Animal

Practice, (2004) 34/1 (339-353). ISSN: 0195-5616 CODEN: VCNAA6

PUBLISHER IDENT.: S 0195-5616(03)00135-9

COUNTRY: United States

DOCUMENT TYPE: Journal; Article FILE SEGMENT: 016 Cancer

018 Cardiovascular Diseases and Cardiovascular Surgery

029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

052 Toxicology

LANGUAGE: English

- L6 ANSWER 20 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
- TI Intracellular renin and the nature of intracrine enzymes.
- Recently, the binding of renin and prorenin to cellular receptors with the AB subsequent generation of second messengers and the production of physiological effects has been demonstrated. In addition, the internalization of prorenin by target cells has been associated with increased cellular synthesis of angiotensin and cardiac pathology. Also, a renin transcript lacking the sequences encoding a secretory signal has been reported, and this transcript appears to produce a renin that acts in the cell that synthesized it. Some years ago, we coined the term intracrine for a peptide hormone or factor that acts in the intracellular space either after internalization or retention in its cell of synthesis. Thus defined, a wide variety of peptides display intracrine functionality, including hormones, growth factors, transcription factors, and enzymes. For example, considerable evidence indicates that angiotensin II is an intracrine. Also, general principles of intracrine functionality have been developed. Thus, recent evidence demonstrates that the prorenin/renin molecule is an intracrine enzyme. Here, the actions of intracrine enzymes (angiogenin, phosphoglucose isomerase, phospholipase A2, granzyme A and B, thioredoxin, platelet-derived endothelial growth factor, and serine protease inhibitors) are reviewed. The relation of prorenin/renin to other intracrine enzymes, and to intracrines in general, is discussed.

ACCESSION NUMBER: 2003317098 EMBASE

TITLE: Intracellular renin and the nature of intracrine enzymes.

AUTHOR: Re R.N.

CORPORATE SOURCE: Dr. R.N. Re, Research Division, Ochsner Clinic Foundation,

1514 Jefferson Highway, New Orleans, LA 70121, United

States. rre@ochsner.org

SOURCE: Hypertension, (1 Aug 2003) 42/2 (117-122).

Refs: 75

ISSN: 0194-911X CODEN: HPRTDN

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review FILE SEGMENT: 003 Endocrinology

018 Cardiovascular Diseases and Cardiovascular Surgery

029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

- L6 ANSWER 21 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
- Duraflo II coating of cardiopulmonary bypass circuits reduces complement activation, but does not affect the release of granulocyte enzymes in fully heparinized patients: A European multicentre study.
- Objective: This study was carried out to: (a) compare complement and AB granulocyte activation during cardiac operations in patients operated with cardiopulmonary bypass coated with heparin by the Duraflo II method, with activation in patients operated with uncoated circuits; and (b) relate complement, and granulocyte activation to selected adverse effects, Methods: In a multicentre study among Rikshospitalet, Ullevaal Hospital in Norway and Uppsala University Hospital in Sweden, plasma concentrations of the complement activation products C4b/iC4b/C4e (C4bc), C3b/iC3b/C3e (C3bc), the terminal SC5b-9 complement complex (TCC), and the granulocyte proteins myeloperoxidase and lactoferrin were assessed in two groups of patients undergoing aortocoronary bypass. Seventy-six patients underwent surgery operated with circuits coated by the Duraflo II heparin coating and 75 with uncoated circuits. The same amount of systemic heparin was administered to all patients. Results: In both groups a significant increase in C4bc was first seen by the end of operation, from 86.7 ± 12.5 to 273.0 \pm 277.4 nM in controls and from 86.9 \pm 18.5 to 320.2 ± 190.5 nM in the control group, confirming previous documentation that the classical pathway is not activated during CPB, but as a consequence of protamin administration. The formation of C4bc did not differ significantly between the two groups. In the uncoated group the C3bc

concentration increased from 124.0 ± 15.3 to a maximum of $1176.1 \pm$ 64.7 nM (P < 0.01) and in the coated group it increased from 129.8 \pm 16.1 to a maximum of 1019.4 \pm 54.9 nM (P < 0.01) during CPB. Summary values but not peak values differed significantly between the groups. In the uncoated group the TCC concentration increased from 0.52 \pm 0.03 to a maximum value of $8.09 \pm 0.57 \text{ AU/ml}$ (P < 0.01) while in the coated group the TCC concentration increased from a baseline of 0.53 ± 0.03 to a peak value of 5.2 ± 0.24 AU/ml (P < 0.01). The difference between the peak values was statistically significant (P = 0.00002). In both groups a significant increase in myeloperoxidase and lactoferrin release was observed by the end of operation. There was no difference in myeloperoxidase or lactoferrin release between the two groups. TCC levels were compared to the occurrence of perioperative infarction, development of lung or renal failure, postoperative bleeding, time on ventilator and days in hospital. Three patients developed perioperative infarction; the peak levels of TCC were significantly higher in these patients than in the 148 patients that did not develop infarction. The reduction in TCC formation in the heparin-coated group was not associated with differences in any of the other clinical parameters. Few adverse effects occurred in the study. The peak values of C3bc were higher in the patients needing inotropic support than in those who did not, the relevance of this finding remains uncertain. Conclusion: It is concluded that the Duraflo II heparin coating reduces complement activation, particularly TCC formation, during CPB, but not the release of specific neutrophil granule enzymes. No certain correlation was established between complement and granulocyte activation and clinical outcome.

ACCESSION NUMBER: 97068280 EMBASE

DOCUMENT NUMBER: 1997068280

TITLE: Duraflo II coating of cardiopulmonary bypass circuits

reduces complement activation, but does not affect the release of granulocyte enzymes in fully heparinized

patients: A European multicentre study.

AUTHOR: Fosse E.; Thelin S.; Svennevig J.L.; Jansen P.; Mollnes

T.E.; Hack E.; Venge P.; Moen O.; Brockmeier V.; Dregelid E.; Halden E.; Hagman L.; Videm V.; Pedersen T.; Mohr B.

E. Fosse, Dept.of Thor.Surgery/Anaesthesiology, Ullevaal

Hospital, Oslo, Norway

SOURCE: European Journal of Cardio-thoracic Surgery, (1997) 11/2

(320-327). Refs: 27

ISSN: 1010-7940 CODEN: EJCSE7

PUBLISHER IDENT.: S 1010-7940(96)01062-7

COUNTRY: Netherlands

DOCUMENT TYPE:

CORPORATE SOURCE:

Journal; Article

FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
018 Cardiovascular Diseases and Cardiovascular Surgery

025 Hematology

026 Immunology, Serology and Transplantation

LANGUAGE: English SUMMARY LANGUAGE: English

- L6 ANSWER 22 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
- TI Attenuation of changes in leukocyte surface markers and complement activation with heparin-coated cardiopulmonary bypass.
- AB Background. The inflammatory response induced by cardiopulmonary bypass can result in severe organ dysfunction in some patients. This postperfusion response is caused mainly by contact between blood and the foreign surface of the cardiopulmonary bypass equipment and includes adhesion of leukocytes to vascular endothelium, which precedes a series of events that mediate inflammatory damage to tissues. Methods. Low-risk patients accepted for coronary artery bypass grafting were randomized to operation with the cardiopulmonary bypass surface either completely heparin coated (Duraflo II) or uncoated. There were 12 patients in each group. Blood plasma sampled during cardiopulmonary bypass was analyzed for complement activation (C3bc and terminal SC5b-9 complement complex) and neutrophil activation (lactoferrin and myeloperoxidase). In addition, neutrophils, monocytes, and platelets were counted, and the

expression of surface markers on the neutrophils and monocytes (complement receptor [CR] 1, CR3, CR4, and L-selectin) and on the platelets (p-selectin and CD41) was quantified with flow cytometry. Results. Clinical and surgical results were similar in both groups. In the group with the heparin-coated surface, the formation of the terminal SC5b-9 complement complex was significantly reduced, and the counts of circulating leukocytes and platelets were significantly less reduced initially but were higher at the end of cardiopulmonary bypass compared with baseline. Also, the expression of CR1, CR3, and CR4 was significantly less upregulated and the L-selectin, significantly less downregulated on monocytes and neutrophils. Conclusions. We conclude that heparin coating reduces complement activation and attenuates the leukocyte integrin and selectin response that occurs when uncoated circuits are used.

ACCESSION NUMBER: 97027337 EMBASE

DOCUMENT NUMBER:

1997027337

TITLE:

Attenuation of changes in leukocyte surface markers and complement activation with heparin-coated cardiopulmonary

bypass.

AUTHOR:

Moen O.; Hogasen K.; Fosse E.; Dregelid E.; Brockmeier V.;

Venge P.; Harboe M.; Mollnes T.E.

CORPORATE SOURCE:

Dr. O. Moen, Department of Cardiothoracic Surgery, Ulleval

Hospital, N-0407 Oslo, Norway

SOURCE:

Annals of Thoracic Surgery, (1997) 63/1 (105-111).

Refs: 25

ISSN: 0003-4975 CODEN: ATHSAK

PUBLISHER IDENT.:

5 0003-4975(96)00743-6

COUNTRY:

United States

Journal; Article

DOCUMENT TYPE: FILE SEGMENT: 009 Surgery

Chest Diseases, Thoracic Surgery and Tuberculosis 015 Cardiovascular Diseases and Cardiovascular Surgery 018

Immunology, Serology and Transplantation 026

030 Pharmacology

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

ANSWER 23 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. L6

Myocardial neutrophil sequestration and activation related to the TI reperfusion of human heart during coronary artery surgery.

Objective: The aim was to determine if neutrophils are activated and AΒ sequestered as they pass through postischaemic human myocardium. Methods: The occurrence of neutrophil activation during the reperfusion of the ischaemic myocardium was investigated in 16 selected patients undergoing coronary artery bypass surgery. Neutrophils were counted and elastase and lactoferrin released into the plasma were measured simultaneously in myocardial venous blood and in peripheral venous blood, before aortic cross clamping (T0), and two (T1), 10 (T2), and 20 (T3) min after unclamping. Results: At TO, no statistically significant difference was noted between peripheral and myocardial blood with respect to the three variables studied. Reperfusion was associated with a significantly lower neutrophil count in myocardial blood compared to peripheral blood (p<0.001), suggesting that neutrophils were trapped within the myocardium during reperfusion. In addition, levels of elastase (T1, T2, and T3), and lactoferrin (T1) were significantly higher in myocardial blood as compared to peripheral blood (p < 0.001), suggesting that activated neutrophils released their granular content into the plasma milieu. Conclusion: We provide evidence consistent with local neutrophil activation during myocardial reperfusion in patients undergoing coronary artery bypass surgery, in addition to the well described systemic activation related to cardiopulmonary bypass.

94262503 EMBASE ACCESSION NUMBER:

DOCUMENT NUMBER:

1994262503

TITLE:

Myocardial neutrophil sequestration and activation related to the reperfusion of human heart during coronary artery

surgery.

AUTHOR:

Farah B.; Vuillemenot A.; Lecompte T.; Bara L.; Pasquier

C.; Jebara V.; Carpentier A.; Fabiani J.

Serv. de Chirurgie Cardio-Vasculaire, Hopital Broussais, 96 CORPORATE SOURCE:

rue Didot,75014 Paris, France

Cardiovascular Research, (1994) 28/8 (1226-1230). SOURCE:

ISSN: 0008-6363 CODEN: CVREAU

COUNTRY: United Kingdom DOCUMENT TYPE: Journal; Article

Cardiovascular Diseases and Cardiovascular Surgery FILE SEGMENT: 018

> 026 Immunology, Serology and Transplantation

LANGUAGE: English SUMMARY LANGUAGE: English

ANSWER 24 OF 25 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. L6

on STN

The effects of nutrients on lipoprotein susceptibility to oxidation. TI

ACCESSION NUMBER: 92122606 EMBASE

1992122606 DOCUMENT NUMBER:

TITLE: The effects of nutrients on lipoprotein susceptibility to

oxidation.

AUTHOR: Berry E.M. CORPORATE SOURCE: Israel

SOURCE: Current Opinion in Lipidology, (1992) 3/1 (5-11).

ISSN: 0957-9672 CODEN: COPLEU

United Kingdom COUNTRY:

DOCUMENT TYPE: Journal; General Review

Public Health, Social Medicine and Epidemiology FILE SEGMENT: 017

> Cardiovascular Diseases and Cardiovascular Surgery 018

029 Clinical Biochemistry 037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE: English SUMMARY LANGUAGE: English

TΤ

ANSWER 25 OF 25 DGENE COPYRIGHT 2005 The Thomson Corp on STN L6

Producing a reconstructed oocyte for xenotransplantation purposes comprises whole cell injection of donor cells into an enucleated oocyte

to form a reconstructed oocyte.

ANADM07211 DNA **DGENE**

The invention describes a method of producing a reconstructed oocyte. The AΒ method comprises selecting one or more recipient oocytes from a mammal of specific species, enucleating the selected recipient oocytes, selecting one or more somatic donor cells from a donor cell source, injecting a whole cell from the donor cells into an enucleated oocyte to form a reconstructed oocyte, and culturing the reconstructed oocyte under conditions to ensure development of the reconstructed oocyte to a further developmental stage. The methods are useful for producing cloned mammals based on whole cell intracytoplasmic microinjection. The cloned animals may be used as bioreactors to produce proteins of potential value expressed from genes introduced into the cloned animal through genetic engineering techniques. The cloned animal cells or tissues for xenotransplantation may be used to treat diseases, conditions and disabilities including Parkinson's and Alzheimer's diseases, spinal cord

injury, stroke, burns, heart disease, diabetes, osteoarthritis or rheumatoid arthritis. The significant advantages of the method over the approaches currently available are: the method saves time and labour during the nuclear transfer process essential to successful cloning; the method reduces the extent of oocyte manipulation required in the cloning process; and the method improves the resulting efficiency of cloning. This sequence represents a primer used to detect transgene alphaLA-pLF comprising porcine lactoferrin (pLF)

driven by the lactoalbumin promoter (alphaLA) to assist detection of cloned piglet embryos. DGENE

ACCESSION NUMBER: ADM07211 DNA

TITLE: Producing a reconstructed oocyte for xenotransplantation

purposes comprises whole cell injection of donor cells into

an enucleated oocyte to form a reconstructed oocyte.

INVENTOR: Yang X; Lee J PATENT ASSIGNEE: (YANG-I) YANG X. (LEEJ-I) LEE J.

PATENT INFO: US 2004077077 A1 20040422 15p

APPLICATION INFO: US 2002-274432 20021018 PRIORITY INFO: US 2002-274432 20021018

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: 2004-340006 [31]

DESCRIPTION: Lactoferrin (pLF)-lactoalbumin promoter (alphaLA)

transgene primer #1.

=> d his

L1

L2

L3

L5

T₁6

(FILE 'HOME' ENTERED AT 15:53:22 ON 16 MAR 2005)

FILE 'MEDLINE, JAPIO, BIOSIS, WPIDS, JICST-EPLUS, BIOTECHDS, HCAPLUS, SCISEARCH, CEN, CEABA-VTB, BIOBUSINESS, EMBASE, DGENE' ENTERED AT 15:54:03 ON 16 MAR 2005

1 S LACTOFERRIN AND (REDUCE CIRCULATING LEVELS OF CHOLESTEROL?)

0 S LACTOFERRIN COMPOSITION ADJ2 ADMINISTRATION

18 S LACTOFERRIN COMPOSITION

L4 26082 S LACTOFERRIN

0 S L4 AND (REDUCE VASCULAR INFLAMMATION?)

25 S HEART DISEASE AND L4

=> s l4 and diabetes

L7 205 L4 AND DIABETES

=> s 14 and hypertension

4 FILES SEARCHED...

L8 51 L4 AND HYPERTENSION

=> s 17 and treatment

L9 38 L7 AND TREATMENT

=> d 18 and treatment

'AND' IS NOT A VALID FORMAT

'TREATMENT' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT): end

=> s 18 and treatment

L10 16 L8 AND TREATMENT

=> d l10 ti abs ibib tot

L10 ANSWER 1 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Comparative study of **lactoferrin** and other blood markers of inflammatory stress between preeclamptic and normal pregnancies.

AΒ Objective: To test lactoferrin as a blood discriminator of neutrophil activation between normal and preeclamptic pregnancy. Design: Comparative study between normal (n = 40) and preeclamptic women receiving treatment (n = 42) in the third trimester of pregnancy and in the post partum period (30 women with normal pregnancy and 22 with preeclampsia). Methods: Blood, serum or plasma measurements of neutrophils, lactoferrin, vitamin C, vitamin E, lipid peroxidation products, elastase, C-reactive protein (CRP), gamma-qlutamyltranspeptidase (qamma-GT), haptoglobin, osmotic fragility, urea, creatinine, uric acid, transaminases (ASAT, ALAT), lactic dehydrogenase (LDH), platelets, red and white blood cells. Results: In preeclamptic women the ratios of lactoferrin per neutrophil or per erythrocyte are higher before delivery than in normal women but decrease after delivery. Delivery induces a greater inflammatory response in normal pregnancy as detected by blood concentrations of inflammatory

markers and hepatic and renal parameters. Conclusion: Whereas in normal

pregnant women neutrophil activation increases with delivery, in

preeclamptic women the opposite occurs.

ACCESSION NUMBER:

1996:227349 BIOSIS

DOCUMENT NUMBER:

PREV199698783478

TITLE:

Comparative study of lactoferrin and other blood

markers of inflammatory stress between preeclamptic and

normal pregnancies.

AUTHOR (S):

Rebelo, Irene [Reprint author]; Carvalho-Guerra, F.;

Perira-Leite, L.; Quintanilha, Alexandre

CORPORATE SOURCE:

Dep. Bioquimica, Fac. Farm., Univ. Porto, Rua Anibal Cunha

164, 4000 Porto, Portugal

SOURCE:

European Journal of Obstetrics and Gynecology and

Reproductive Biology, (1996) Vol. 64, No. 2, pp. 167-173.

CODEN: EOGRAL. ISSN: 0301-2115.

DOCUMENT TYPE:

Article English

LANGUAGE: ENTRY DATE:

Entered STN: 8 May 1996

Last Updated on STN: 8 May 1996

L10 ANSWER 2 OF 16 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Composition for supplementing nutritional deficiencies comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium,

zinc, and copper.

AN 2004-634381 [61] WPIDS

CR 2004-440316 [41]

AB US2004166175 A UPAB: 20040923

NOVELTY - Composition for supplementing nutritional deficiencies (I) comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc and copper.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a composition (II) comprising (mg) calcium (less than 160, preferably 90 - 110 mg), iron (more than 20, preferably 58.5 - 71.5) and copper (1.8 - 2.2).

ACTIVITY - Anabolic.

A study was undertaken to evaluate the effectiveness of the composition of the present invention in the treatment of patients. The objective of the study is to determine whether oral intake of the composition results in an improvement of the nutritional status of a patient in a physiologically stressful state. A double-blind, placebo controlled study was conducted over a six-month period. A total of 120 subjects (60 pregnant women entering the second trimester of pregnancy and 60 lactating women), aged 20 - 35 years, were chosen for the study. An initial assessment of the nutritional status of each woman was conducted utilizing methods such as the peroxide hemolysis test to assess Vitamin E deficiency, measurement of erythrocyte transketolase activity to determine thiamine levels, determination of erythrocyte glutathione reductase activity to assess riboflavin status, and high performance liquid chromatography to directly measure pyridoxine levels. The 120 subjects were separated into four separate groups of 30 women. In a first group comprising only pregnant women and in a second group comprising only lactating women, each subject was administered 2 caplets, daily, of (A1). In a third group comprising only pregnant women and in a fourth group comprising only lactating women, each subject was administered 2 placebo caplets, daily. No other nutritional supplements were taken by the subjects during the assessment period. An assessment of the nutritional status of each woman was conducted utilizing methods such as the peroxide hemolysis test to assess vitamin E deficiency, measurement of erythrocyte transketolase activity to determine thiamine levels, determination of erythrocyte glutathione reductase activity to assess riboflavin status, and high performance liquid chromatography to directly measure pyridoxine levels at one month intervals for a six month period. The data was evaluated using multiple linear regression analysis and a standard t-test. A statistically significant improvement in the nutritional status with respect to vitamin E, thiamine, riboflavin, and pyridoxine was observed in the treated subjects upon completion of the study over the controls.

MECHANISM OF ACTION - None given.

USE - For supplementing nutritional deficiencies to a patient (particularly a pregnant patient or a lactating patient) who is in a

stressful state e.g. a disease state such as pulmonary disorder, a hematological/oncological disorder, a cancer, a disorder of the immune system, a cardiovascular disorder, a hepatic/biliary disorder, a disorder associated with pregnant females and a disorder associated with a fetus. The nutritional deficiencies are a result of elevated metabolic demand, increased plasma volume, decreased concentrations of nutrient-binding proteins (e.g. serum-ferritin, maltose-binding protein, lactoferrin, calmodulin, tocopheryl binding protein, riboflavin binding protein, retinol binding protein, transthyretin, high density lipoprotein-apolipoprotein Al, folic acid binding protein, and 25-hydroxyvitamin D binding protein) (all claimed). The disorders associated with pregnant females include osteomalacia and pre-eclampsia and disorders associated with the fetus include neural tube defects and various fetal abnormalities. The pulmonary disorder includes bronchitis, bronchiectasis, atelectasis, pneumonia, diseases caused by inorganic dusts, diseases caused by organic dusts, pulmonary fibrosis and pleurisy. The hematological/oncological disorder includes anemia, hemophilia, leukemia and lymphoma. The disorder of the immune system includes AIDS, AIDS-related complex and bacterial infection. The cardiovascular disorder includes arterial hypertension, orthostatic hypotension, arteriosclerosis, coronary artery disease, cardiomyopathy, arrhythmia, valvular heart disease, endocarditis, pericardial disease, cardiac tumor, aneurysm and peripheral vascular disorder. The hepatic/biliary disorder includes jaundice, hepatic steatosis, fibrosis, cirrhosis, hepatitis, hepatic granuloma, liver tumor, cholelithiasis, cholecystitis and choledocholithiasis.

ADVANTAGE - The compositions optimize good health, provide protection against poor nutrition and disease, provide specific nutrients before, during, and after the physiological processes of pregnancy or lactation, which has a profound, positive and comprehensive impact upon the overall wellness of the developing and newborn child as well as the safety and health of the mother.

Dwg.0/0

ACCESSION NUMBER: 2004-634381 [61] WPIDS

CROSS REFERENCE: 2004-440316 [41] DOC. NO. CPI: C2004-227792

TITLE: Composition for supplementing nutritional deficiencies

comprises vitamin A, vitamin D, vitamin C, vitamin E, B-complex, calcium, iron, magnesium, zinc, and copper.

DERWENT CLASS: B04 B05 D13

INVENTOR(S): BALZER, C; GIORDANO, J A

PATENT ASSIGNEE(S): (BALZ-I) BALZER C; (GIOR-I) GIORDANO J A

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG
-----US 2004166175 A1 20040826 (200461)* 12

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------------|----------------------------------|-------------------|
| US 2004166175 | Al Cont of | US 2002-315159 US 2004-790027 | 20021210 20040302 |

PRIORITY APPLN. INFO: US 2002-315159 20021210; US 2004-790027 20040302

L10 ANSWER 3 OF 16 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Use of phosphodiesterase-IV along with tumor necrosis factor-alpha for treatment/prophylaxis of e.g. pulmonary inflammatory disorders, pulmonary hypertension and asthma.

AN 2004-594021 [57] WPIDS

AB WO2004067006 A UPAB: 20040907

NOVELTY - Treatment or prophylaxis of a phosphodiesterase-IV (PDE-IV) or a tumor necrosis factor- alpha (TNF- alpha) related condition

comprises administration of a PDE IV inhibitor (A) together with a TNF-alpha antagonist (B).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for

- (1) a composition comprising (A) and a TNF-alpha antagonist (B) and a pharmaceutically acceptable excipient; and
- (2) a kit for the **treatment** or prophylaxis of a PDE IV or a TNF-alpha related condition comprising a dosage form comprising (A) and a dosage form comprising (B).

ACTIVITY - Antiinflammatory; Respiratory-Gen.; Hypotensive; Antiasthmatic; Antiallergic; Antiarthritic; Osteopathic; Ophthalmological; Antidiabetic; Antiangiogenic; Antirheumatic; Neuroprotective.

MECHANISM OF ACTION - Phosphodiesterase-IV (PDE IV) inhibitor; TNF-alpha antagonist. Test details are described for TNF- alpha antagonistic activity but no results given.

USE - (A) along with (B) is useful in the **treatment** of PDE-IV or TNF- alpha related conditions (claimed) such as inflammatory disorders e.g. pulmonary inflammatory disorders; pulmonary **hypertension**, asthma, exercise induced asthma, pollution induced asthma, allergy induced asthma, chronic obstructive pulmonary disorder (COPD), osteoarthritis, adult respiratory distress syndrome, infant respiratory distress syndrome, retinitis, uveitis, glaucoma, retinopathy, diabetic angiopathy, edema formation, arthritis, rheumatoid arthritis and multiple sclerosis.

Dwg.0/0

ACCESSION NUMBER:

2004-594021 [57] WPIDS

DOC. NO. CPI:

C2004-216075

TITLE:

Use of phosphodiesterase-IV along with tumor necrosis

factor-alpha for treatment/prophylaxis of e.g. pulmonary inflammatory disorders, pulmonary

hypertension and asthma.

DERWENT CLASS:

B02 B03

INVENTOR(S):

WARNER, J M

PATENT ASSIGNEE(S):

(PHAA) PHARMACIA CORP

COUNTRY COUNT:

108

PATENT INFORMATION:

| PATENT | NO | KIND | DATE | WEEK | LA | PG |
|--------|----|------|------|------|----|----|
| | | | | | | - |

WO 2004067006 A1 20040812 (200457)* EN 66

RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

| | PATENT NO | KIND | APPLICATION | DATE |
|---|---------------|------|---------------|----------|
| | | | | |
| 1 | WO 2004067006 | A1 | WO 2004-IB616 | 20040123 |

PRIORITY APPLN. INFO: US 2003-442881P 20030127

L10 ANSWER 4 OF 16 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Ophthalmic solution useful for the **treatment** of increased intraocular pressure comprises a prostaglandin of the F-series and an antimicrobial peptide.

AN 2004-011506 [01] WPIDS

AB W02003079997 A UPAB: 20040102

NOVELTY - An ophthalmic solution comprises a prostaglandin of the F-series and an antimicrobial peptide.

ACTIVITY - Hypotensive; Ophthalmological.

No biological data given.

MECHANISM OF ACTION - None given.

USE - For the treatment of increased intraocular pressure,

such as caused by glaucoma and for the reduction of ocular hypertension.

ADVANTAGE - The prostaglandin and the antimicrobial peptide work synergistically, to provide beneficial reduction in the incidence of irritant and toxic side effects such as hyperemia, irritation and inflammation of conjunctiva, ocular cell dysplasia, iridial melanocyte hyperplasia, and hyperpigmentation, associated with the prior art prostaglandin compositions. The composition does not contain systemic chemical preservatives such as benzalkonium chloride, BHT or similar irritating phenyl-aromatic preservatives, but instead contains antimicrobial peptides of human eye origin such as lactoferrin, thus the composition is suitable for dissension in multidose format, and has improved patient comfort, compliance, acceptance and safety. Dwg.0/0

ACCESSION NUMBER: 2004-011506 [01] WPIDS

DOC. NO. CPI: C2004-003214

TITLE: Ophthalmic solution useful for the treatment of

increased intraocular pressure comprises a prostaglandin

of the F-series and an antimicrobial peptide.

DERWENT CLASS: B02 B05

INVENTOR(S): JOHNSON, J; MAXEY, K M
PATENT ASSIGNEE(S): (CAYM-N) CAYMAN CHEM CO

COUNTRY COUNT: 103

PATENT INFORMATION:

| PATENT | NO | KIND | DATE | WEEK | LA | PG |
|-------------|----|------|------------|------|----|----|
| | | | - - | | | _ |

WO 2003079997 A2 20031002 (200401)* EN 11

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK

DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT

RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA

ZM ZW

AU 2003222049 A1 20031008 (200432) EP 1501530 A2 20050202 (200510) EN

R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|--|----------------|--|----------------------------------|
| WO 2003079997 AU 2003222049 EP 1501530 | A2 A1 A2 | WO 2003-US8935 AU 2003-222049 EP 2003-718033 | 20030321 20030321 20030321 |
| | | WO 2003-US8935 | 20030321 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2003222049 | Al Based on | WO 2003079997 |
| EP 1501530 | A2 Based on | WO 2003079997 |

PRIORITY APPLN. INFO: US 2002-367071P 20020321

L10 ANSWER 5 OF 16 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN Treating liver dysfunction or parenchyma damage - by admin. of lactoferrin, e.g. for improving excretory, detoxification, conjugation and synthesis functions.

AN 1996-078107 [09] WPIDS

AB DE 4426165 A UPAB: 19960305

The use of lactoferrin(I) is claimed for the prophylaxis and therapy of liver function disorders and/or liver parenchyma damage and their sequelae. (I) is opt. used in combination with other substances or proteins.

USE - The liver dysfunction treated or prevented specifically results from inflammatory or toxic damage to liver cells, hepatic congestion or liver parenchyma damage. The disorder is specifically excretory, conjugation or synthesis dysfunction, and may be lead to hepatic deficiency coma or be combined with bile duct occlusion. The liver parenchyma damage is specifically toxic damage, fatty degeneration or necrosis of liver cells or liver fibrosis or cirrhosis, and may lead to portal hypertension. (I) is especially used for prophylaxis or treatment of intoxication by ammonia or protein degradation after liver dysfunction (claimed). (I) may also be used as hepatoprotective agent for improving the detoxification and metabolic function of a transplanted liver.

ADVANTAGE - (I) generally improves liver function; rapidly reduces elevated blood levels of liver enzymes in patients with hepatic insufficiency due to alcohol-induced toxic liver damage; improves protein synthesis, increases blood transferrin, fibrinogen and albumin levels and reduces plasma bilirubin levels in hepatic insufficiency patients; and improves detoxification, e.g. in reducing blood ammonia levels in patients with severe liver dysfunction.

Dwg.0/0

ACCESSION NUMBER: 1996-078107 [09] WPIDS

DOC. NO. CPI: C1996-025888

TITLE: Treating liver dysfunction or parenchyma damage - by

admin. of lactoferrin, e.g. for improving

excretory, detoxification, conjugation and synthesis

functions.

DERWENT CLASS: B04

PATENT ASSIGNEE(S): (NITS-N) NITSCHE GMBH H

COUNTRY COUNT:

PATENT INFORMATION:

| PATENT NO | KIND DATE | WEEK | LA | PG |
|--------------------------|----------------------------|---------------|----|----|
| DE 4426165 DE 4426165 | A1 19960125 C2 19990610 | • • • • • • • | | 7 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|------------|------|-----------------|----------|
| DE 4426165 | A1 | DE 1994-4426165 | 19940723 |
| DE 4426165 | C2 | DE 1994-4426165 | 19940723 |

PRIORITY APPLN. INFO: DE 1994-4426165 19940723

L10 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Gene expression profiles and biomarkers for the detection of hyperlipidemia and other disease-related gene transcripts in blood

AB The present invention is directed to detection and measurement of gene transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular hyperlipidemia, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chagas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen.

ACCESSION NUMBER: 2005:156681 HCAPLUS

Correction of: 2005:60757

DOCUMENT NUMBER: 142:216629

Correction of: 142:132329

TITLE: Gene expression profiles and biomarkers for the

detection of hyperlipidemia and other disease-related

gene transcripts in blood

INVENTOR(S): Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.

U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 802,875.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---------|----------|------------------------------------|---|
| US 2004248170 | A1 | 20041209 | US 2004-812777 | 20040330 |
| US 2004014059 | A1 | 20040122 | US 2002-268730 | 20021009 |
| US 2004248169 | A1 | 20041209 | US 2004-812737 | 20040330 |
| US 2004248170 | A1 | 20041209 | US 2004-812777 | 20040330 |
| US 2004248170 | A1 | 20041209 | US 2004-812777 | 20040330 |
| US 2004265869 | A1 | 20041230 | US 2004-812716 | 20040330 |
| WO 2004112589 | A2 | 20041229 | WO 2004-US20836 | 20040621 |
| W: AE, AG, AL, | AM, AT, | AU, AZ, | BA, BB, BG, BR, BW, | BY, BZ, CA, CH, |
| CN, CO, CR, | CU, CZ, | DE, DK, | DM, DZ, EC, EE, EG, | ES, FI, GB, GD, |
| GE, GH, GM, | HR, HU, | ID, IL, | IN, IS, JP, KE, KG, | KP, KR, KZ, LC, |
| LK, LR, LS, | LT, LU, | LV, MA, | MD, MG, MK, MN, MW, | MX, MZ, NA, NI, |
| | | | RO, RU, SC, SD, SE, | • |
| | | | UG, US, UZ, VC, VN, | |
| | | | NA, SD, SL, SZ, TZ, | |
| | | | TM, AT, BE, BG, CH, | |
| | | • | IE, IT, LU, MC, NL, | |
| | BF, BJ, | CF, CG, | CI, CM, GA, GN, GQ, | GW, ML, MR, NE, |
| SN, TD, TG | | | VG 1000 1151055 | D 10000106 |
| PRIORITY APPLN. INFO.: | | | US 1999-115125P | |
| | | | US 2000-477148 | |
| _ | | | US 2002-268730 | |
| | | | US 2003-601518 | A2 20030620 |
| | | • | US 2004-802875 | A2 20040312 |
| | | • | US 2001-271955P | |
| | | | US 2001-275017P US 2001-305340P | P 20010312 |
| | | | US 2001-305340P | |
| | | | US 2004-809675 | |
| | | | | A 20040323 |
| | | | 05 2001 012/// | 20010550 |

L10 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN

ΤI Gene expression profiles and biomarkers for the detection of Chagas

disease and other disease-related gene transcripts in blood The present invention is directed to detection and measurement of gene AB transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular Chagas disease, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chaqas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

2005:60760 HCAPLUS ACCESSION NUMBER:

Correction of: 2004:1036573

DOCUMENT NUMBER:

142:153477

Correction of: 142:16776

Gene expression profiles and biomarkers for the TITLE:

detection of Chagas disease and other disease-related

gene transcripts in blood

INVENTOR (S):

Liew, Choong-Chin

PATENT ASSIGNEE(S):

Chondrogene Limited, Can.

SOURCE:

U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S.

Ser. No. 802,875.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

39

PATENT INFORMATION:

| PATENT NO. | PATENT NO. KIND DATE | | APPLICATION NO. | DATE |
|--------------------------------|----------------------|----------|----------------------------------|---|
| US 2004241729 | | 20041202 | | 20040330 |
| US 2004014059 | | 20040122 | US 2002-268730 | 20021009 |
| US 2004241729 | | 20041202 | US 2004-813097 | 20040330 |
| US 2004241729 | | 20041202 | US 2004-813097 US 2004-812737 | 20040330 |
| US 2004248169 US 2004265869 | | | US 2004-812737 | 20040330 20040330 |
| WO 2004112589 | | | WO 2004-012716 | |
| | | | BA, BB, BG, BR, BW, | |
| | | | DM, DZ, EC, EE, EG, | • |
| , , , | | • | IN, IS, JP, KE, KG, | • |
| | | | MD, MG, MK, MN, MW, | |
| | | • | RO, RU, SC, SD, SE, | |
| | | | UG, US, UZ, VC, VN, | • • • • • |
| RW: BW, GH, GM, | KE, LS, | MW, MZ, | NA, SD, SL, SZ, TZ, | UG, ZM, ZW, AM, |
| AZ, BY, KG, | KZ, MD, | RU, TJ, | TM, AT, BE, BG, CH, | CY, CZ, DE, DK, |
| EE, ES, FI, | FR, GB, | GR, HU, | IE, IT, LU, MC, NL, | PL, PT, RO, SE, |
| SI, SK, TR, | BF, BJ, | CF, CG, | CI, CM, GA, GN, GQ, | GW, ML, MR, NE, |
| SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-115125P | |
| | | | US 2000-477148 | |
| | | | US 2002-268730 | A2 20021009 |
| | | | US 2003-601518 | A2 20030620 |
| | | | US 2004-802875 | |
| | | | US 2001-271955P | |
| | | | US 2001-275017P | |
| | | | US 2001-305340P US 2002-85783 | |
| | | | US 2002-85783 US 2004-809675 | A2 20020228 A 20040325 |
| | | | 03 2004-0036/3 | A 20040325 |

L10 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN

Gene expression profiles and biomarkers for the detection of lung ТT disease-related and other disease-related gene transcripts in blood

The present invention is directed to detection and measurement of gene AB transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing and monitoring diseases using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chaqas disease, asthma, and manic depression syndrome. The present invention also describes methods by which delineation of the sequence and/or

quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen.

ACCESSION NUMBER:

2005:60759 HCAPLUS

Correction of: 2004:1036572 142:111840

DOCUMENT NUMBER:

Correction of: 142:16824

TITLE:

Gene expression profiles and biomarkers for the

US 2004-813097 A 20040330

detection of lung disease-related and other disease-related gene transcripts in blood

INVENTOR (S):

Liew, Choong-Chin

PATENT ASSIGNEE(S):

Chondrogene Limited, Can.

SOURCE:

U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S.

Ser. No. 802,875. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | CENT | NO. | | | KIN | | DATE | | j | APPL | I CAT | ION I | NO. | | D - | ATE | |
|----------|------|-------|------|-----|------|-----|------|------|-----|----------------|-------|----------------|------------|-----|------------|-------|------------|
| US | 2004 | 2417 | 2.8 | | Α1 | | 2004 | 1202 | 1 | US 2 | 004- | 8127 | 64 | | 2 | 0040 | 330 |
| | 2004 | | | | | | 2004 | _ | | | | | | | | 0021 | |
| | 2004 | | | | A1 | | 2004 | | | | | | | | | 0040 | |
| | 2004 | | _ | | A1 | | 2004 | | | | | | | | | | |
| | 2004 | | | | | | 2004 | | | | | | | | | | |
| US | 2004 | 26586 | 69 | | · A1 | | 2004 | | | | | | 16 | | | | |
| | 2004 | | | | | | 2004 | | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, |
| | • | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, |
| | | | | | | | LV, | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | |
| | RW: | | | | | | MW, | | | | | | | | | | |
| | | | | | | | RU, | | | | | | | | | | |
| | | - | | - | - | - | GR, | - | | - | - | - | - | | | - | |
| | | - | | - | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | ΝĒ, |
| | | | TD, | | | | | | _ | | | | | | | | |
| PRIORITY | APP | LN. | INFO | . : | | | | | | | | | | | | 9990 | |
| | | | | | | | | | | | | | | | | 0000 | |
| | | | | | | | | | | | | | | | | 0021 | |
| | | | | | | | | | | | | | | | | 0030 | |
| | | | | | | | | | | | | | | | | 0040 | _ |
| | | | | | | | | | | US 20 | | | | | | 0010 | |
| | | | | | | | | | | US 20 US 20 | | | | | | 0010 | |
| | | | | | | | | | , | 15 21 15 21 | 707- | 3 U D 3 4 | ± U F | | r 2 700 | 0010 | 720 713 |
| | | | | | | | | | ' | 15 21 15 21 | 104-0 | 3076. 3096. | J 75 | • | n 2 N 2 | 0040 | 440 325 |
| | | | | | | | | | | US 20 | | | | | | 0040 | |
| , | | | | | | | | | | ٠٠ ٢٠ | JUI (| J / 1 | . . | | 2 | 0040. | |

L10 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Gene expression profiles and biomarkers for the detection of

hyperlipidemia and other disease-related gene transcripts in blood AB The present invention is directed to detection and measurement of gene transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular hyperlipidemia, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chaqas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen.

ACCESSION NUMBER:

2005:60757 HCAPLUS

Correction of: 2004:1060658

DOCUMENT NUMBER:

142:132329

Correction of: 142:33757

TITLE:

Gene expression profiles and biomarkers for the detection of hyperlipidemia and other disease-related

gene transcripts in blood

INVENTOR(S): Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.

SOURCE: U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S.

Ser. No. 802,875. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: Patent English

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|----------|
| | | | | |
| US 2004248170 A1 | | 20041209 | US 2004-812777 | 20040330 |
| PRIORITY APPLN. INFO.: | | | US 1999-PV115125 | 19990106 |
| | | | US 2000-477148 | 20000104 |
| | | | US 2002-268730 | 20021009 |
| | | | US 2003-601518 | 20030620 |
| | | | US 2004-802875 | 20040312 |

L10 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Analysis of genetic information contained in peripheral blood for diagnosis, prognosis and monitoring treatment of allergy, infection and genetic disease in human

The present invention is directed to detection and measurement of gene AB transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular allergy, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chagas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen. [This abstract record is one of 3 recordsfor this document necessitated by thelarge number of index entries required tofully index the document and publicationsystem constraints.].

ACCESSION NUMBER: 2005:60755 HCAPLUS

Correction of: 2004:1036570

DOCUMENT NUMBER:

142:154259

Correction of: 142:36938

TITLE:

Analysis of genetic information contained in peripheral blood for diagnosis, prognosis and monitoring **treatment** of allergy, infection

and genetic disease in human

INVENTOR(S):

Liew, Choong-Chin

PATENT ASSIGNEE(S):

Chondrogene Limited, Can.

SOURCE:

U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S.

Ser. No. 802,875. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|--------|-----------|-------------------------|-------------|
| US 2004241726 | A1 | 20041202 | US 2004-812707 | 20040330 |
| US 2004014059 | A1 | 20040122 | US 2002-268730 | 20021009 |
| US 2004241726 | A1 | 20041202 | US 2004-812707 | 20040330 |
| US 2004241726 | A1 | 20041202 | US 2004-812707 | 20040330 |
| US 2004248169 | A1 | 20041209 | US 2004-812737 | 20040330 |
| US 2004265869 | A1 | 20041230 | US 2004-812716 | 20040330 |
| WO 2004112589 | A2 | 20041229 | WO 2004-US20836 | 20040621 |
| W: AE, AG, AL, | AM, AT | , AU, AZ, | BA, BB, BG, BR, BW, BY, | BZ, CA, CH, |

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRIORITY APPLN. INFO.:
                                            US 1999-115125P
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                                            US 2000-477148
                                                                B1 20000104
                                            US 2002-268730
                                                                A2 20021009
                                            US 2003-601518
                                                                A2 20030620
                                            US 2004-802875
                                                               A2 20040312
                                            US 2001-271955P
                                                               P 20010228
                                            US 2001-275017P
                                                               P 20010312
                                            US 2001-305340P
                                                               P 20010713
                                            US 2002-85783
                                                               A2 20020228
                                            US 2004-809675
                                                               A 20040325
                                            US 2004-812707
                                                               A 20040330
    ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN
L10
     Gene expression profiles and biomarkers for the detection of
ΤI
     depression-related and other disease-related gene transcripts in blood
     The present invention is directed to detection and measurement of gene
AΒ
     transcripts and their equivalent nucleic acid products in blood. Specifically
     provided is anal. performed on a drop of blood for detecting, diagnosing,
     and monitoring diseases, and in particular mental depression, using
     gene-specific and/or tissue-specific primers. Affymetrix Human Genome
     U133 and ChondroChip microarrays were used to detect differentially
     expressed gene transcripts in hypertension, obesity, allergy,
     systemic steroids, coronary artery disease, diabetes type 2,
     hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis,
     osteoarthritis, liver cancer, schizophrenia, Chagas disease, asthma, and
     manic depression syndrome. The present invention describes methods by
     which delineation of the sequence and/or quantitation of the expression
     levels of disease-specific genes allows for an immediate and accurate
     diagnostic/prognostic test for disease or to assess the effect of a
     particular treatment regimen.
ACCESSION NUMBER:
                         2005:1997 HCAPLUS
DOCUMENT NUMBER:
                         142:111841
                         Gene expression profiles and biomarkers for the
TITLE:
```

detection of depression-related and other disease-related gene transcripts in blood

INVENTOR(S): Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.

SOURCE: U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S.

Ser. No. 802,875.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 39

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | | |
|----------------|--------|------------|---------------------|-----------------|--|--|--|
| | | | | | | | |
| US 2004265868 | A1 | 20041230 | US 2004-812702 | 20040330 | | | |
| US 2004014059 | A1 | 20040122 | US 2002-268730 | 20021009 | | | |
| US 2004248169 | A1 | 20041209 | US 2004-812737 | 20040330 | | | |
| US 2004265869 | A1 | 20041230 | US 2004-812716 | 20040330 | | | |
| US 2004265868 | A1 | 20041230 | US 2004-812702 | 20040330 | | | |
| US 2004265868 | A1 | 20041230 | US 2004-812702 | 20040330 | | | |
| WO 2004112589 | A2 | 20041229 | WO 2004-US20836 | 20040621 | | | |
| W: AE, AG, AL, | AM, AT | , AU, AZ, | BA, BB, BG, BR, BW, | BY, BZ, CA, CH, | | | |
| CN, CO, CR, | CU, CZ | , DE, DK, | DM, DZ, EC, EE, EG, | ES, FI, GB, GD, | | | |
| GE, GH, GM, | HR, HU | , ID, IL, | IN, IS, JP, KE, KG, | KP, KR, KZ, LC, | | | |
| LK, LR, LS, | LT, LU | I, LV, MA, | MD, MG, MK, MN, MW, | MX, MZ, NA, NI, | | | |

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NO. NZ. OM. PG. PH. PL. PT. RO, RU, SC. SD. SE, SG. SK. SL. SY.
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRIORITY APPLN. INFO.:
                                            US 1999-115125P
                                                                P 19990106
                                            US 2000-477148
                                                                B1 20000104
                                            US 2002-268730
                                                                A2 20021009
                                            US 2003-601518
                                                                A2 20030620
                                            US 2004-802875
                                                                A2 20040312
                                            US 2001-271955P
                                                                P 20010228
                                            US 2001-275017P
                                                               P 20010312
                                            US 2001-305340P
                                                               P 20010713
                                            US 2002-85783
                                                               A2 20020228
                                            US 2004-809675
                                                               A 20040325
                                            US 2004-812702
                                                               A 20040330
L10 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN
ΤI
     Compositions comprising recombinant lactoferrin and its variants
     in the treatment of diabetes mellitus
AB
     The present invention relates to methods of using a composition of
     lactoferrin for the treatment of diabetes mellitus as
     manifested by a reduction in the levels of serum glucose, blood pressure,
     obesity, or glycosylated Hb (HbAlc).
ACCESSION NUMBER:
                         2004:1033558 HCAPLUS
                         141:420455
DOCUMENT NUMBER:
TITLE:
                         Compositions comprising recombinant
                         lactoferrin and its variants in the
                         treatment of diabetes mellitus
INVENTOR(S):
                         Engelmayer, Jose; Varadhachary, Atul
                         Agennix Incorporated, USA
PATENT, ASSIGNEE(S):
                         PCT Int. Appl., 32 pp.
SOURCE:
```

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

| PATENT NO. | | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
|--------------|---------------|-----|-----|-------------|-------------|------|-----------------|-----------------|----------------|-----|-----|------|----------|----------|-----|-----|--|
| WO 2004 | WO 2004103285 | | | A2 20041202 | | | WO 2004-US14985 | | | | | | 20040513 | | | | |
| W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | AZ, | BA, | BB, | ВG, | BR, | BW, | BY, | ΒZ, | CA, | CH, | |
| | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, | |
| | GE, | GH, | GM, | HR, | HU, | ID, | ΙL, | IN, | IS, | JΡ, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | |
| | LK, | LR, | LS, | LT, | LU, | ĹV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, | |
| • | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | |
| | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | |
| RW: | BW, | GH, | GM, | ΚE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | |
| | AZ, | BY, | KG, | ΚZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | |
| | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | ΙE, | ΙΤ, | LU, | MC, | NL, | PL, | PT, | RO, | SE, | |
| | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | ΝE, | |
| | SN, | TD, | TG | | | | | | | | | | | | | | |
| US 2005 | US 2005004006 | | | A1 | A1 20050106 | | | 1 | US 2004-844865 | | | | | 20040513 | | | |
| PRIORITY APP | | | | | 1 | US 2 | 003- | 4705 | 49P | | P 2 | 0030 | 514 | | | | |

- L10 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN
- Prostaglandin $F2\alpha$ analogs in combination with antimicrobial proteins for the treatment of glaucoma
- An ophthalmic formulation for the treatment of glaucoma and AB intraocular pressure comprises a prostaglandin compound of the F-series (PGF), and particularly a prodrug form of a PGF2α analog, such as an ester, amide, or internal lactone, wherein the preservative is an antimicrobial peptide, such as lactoferrin. In particularly preferred embodiments, the prostaglandin compound is a macrocyclic internal 1,15-lactone, such as the 16-aryloxy prostaglandin analogs, e.g., fluprostenol or cloprostenol. Thus, a formulation contained fluprostenol

1,15-lactone 0.002, Dextran-70 0.10, HPMC 0.30, NaCl 0.77,KCl 0.12, human recombinant lactoferrin 0.10, HCl and/or NaOH to pH 7.0-7.6, and

water qs to 100%.

ACCESSION NUMBER: 2003:777542 HCAPLUS

DOCUMENT NUMBER:

139:296971

TITLE:

Prostaglandin $F2\alpha$ analogs in combination with antimicrobial proteins for the treatment of

glaucoma

INVENTOR(S): Maxey, Kirk M.; Johnson, Jennifer

PATENT ASSIGNEE(S): SOURCE:

Cayman Chemical Company, USA

PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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KIND
                                       DATE
                                                                                   DATE
      PATENT NO.
                                                       APPLICATION NO.
      WO 2003079997
                                A2
                                        20031002
                                                       WO 2003-US8935
                                                                                    20030321
                                        20040212
      WO 2003079997
                               A3
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
                PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
                UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
                BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                        20050202
                                                      EP 2003-718033
      EP 1501530
                                A2
                                                                                   20030321
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                IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
PRIORITY APPLN. INFO.:
                                                       US 2002-367071P
                                                                               P 20020321
                                                       WO 2003-US8935
                                                                               W 20030321
```

OTHER SOURCE(S): MARPAT 139:296971

L10 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Compositions for improving lipid metabolism

AB A medicinal composition contains as the active ingredient at least one member selected from the group consisting of lactoferrin proteins including lactoferrin and conalbumin and enzymically digested products of lactoferrin proteins including lactoferricin and peptides of conalbumin corresponding to lactoferricin. The composition is useful for improving lipid metabolism For example, it is useful in treating lifestyle-related diseases such as hypercholesterolemia, hypertriglyceridemia, low-d. lipoprotein hypercholesterolemia, high-d. lipoprotein hypocholesterolemia, obesity, fat liver, cholesterol cholelithiasis, severe obesity, hyperlipidemia, hypertension,

type II diabetes. The composition can elevate basal metabolic rate.

ACCESSION NUMBER:

2003:551399 HCAPLUS

DOCUMENT NUMBER:

139:90498

TITLE:

Compositions for improving lipid metabolism

INVENTOR(S):

Harada, Etsumori; Takeuchi, Takashi; Ando, Kunio;

Shimizu, Hirohiko

PATENT ASSIGNEE(S):

Nuclear Receptor Ligand Co., Ltd., Japan

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | | |
|---------------|--------|--------------|-----------------------|--------------|--|--|--|
| | | | | - | | | |
| WO 2003057245 | A1 | 20030717 | WO 2002-JP13858 | 20021227 | | | |
| W: AE AG AL. | AM. AT | . AU. AZ. BA | . BB. BG. BR. BY. BZ. | CA. CH. CN. | | | |

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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                           A1
                                  20041013
                                                                       20021227
     EP 1466621
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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                                  20050127
                                              US 2004-500245
     US 2005020484
                           A1
                                                                       20040625
                                               JP 2001-400641
                                                                    A 20011228
PRIORITY APPLN. INFO.:
                                              WO 2002-JP13858
                                                                    W 20021227
REFERENCE COUNT:
                          24
                                 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 15 OF 16 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
     Biogenic peptides and their potential use.
     This paper reviews bioactive peptides, biogenic peptides, opioid peptides,
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- ΤI
- AB immunostimulating peptides, mineral soluble peptides, antihypertensive peptides and antimicrobial peptides originating from food materials and enzymatic hydrolysis of proteins. Antihypertensive peptides are extensively reviewed and have been divided into angiotensin I-converting enzyme inhibitory peptides and others. These peptides are produced in the enzymatic hydrolysate of treated food materials such as milk, animal and fish meat, maize, wheat, soybeans and egg, and also from microbe-fermented products. Peptides with strong antihypertensive effects on spontaneously hypertensive rats are discussed and are divided into high and low angiotensin I-converting enzyme inhibitory activities. In addition, new topics from our studies on antihypertensive peptides are introduced. Efficacies of these peptides in clinical studies and differences with medicinal substances are summarized. Recent studies in this area shown the possibility of using biogenic peptides for improvements in

treatment or prevention of hypertension.

2003205028 EMBASE ACCESSION NUMBER:

TITLE: Biogenic peptides and their potential use.

AUTHOR: Yamamoto N.; Ejiri M.; Mizuno S.

N. Yamamoto, R/D Center, Calpis Co. Ltd.; 11-10, 5-Chome, CORPORATE SOURCE:

Fuchinobe, Sagamihara, Kanagawa 229, Japan.

naoyuki.yamamoto@calpis.co.jp

SOURCE: Current Pharmaceutical Design, (2003) 9/16 (1345-1355).

Refs: 95

ISSN: 1381-6128 CODEN: CPDEFP

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; General Review

Cardiovascular Diseases and Cardiovascular Surgery FILE SEGMENT: 018

> 029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

- L10 ANSWER 16 OF 16 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
- ΤI The microcirculation in venous hypertension.
- AB Objective: To review the factors that result in skin ulceration of patients with chronic venous insufficiency. Data sources: Index Medicus was searched using an on-line computer system for years 1966-1995 to identify articles relating to venous ulceration and the microcirculation. Data extraction: Articles and section of articles relating to the mechanisms which cause venous ulceration and the efficacy of the treatment of venous ulceration have been included. Data synthesis: It seems unlikely that venous ulceration is attributable to failure of diffusion of oxygen and other small nutritional molecules to the tissues of the skin. It is much more likely that neutrophils attach themselves to

the cutaneous microcirculation, become activated and produce endothelial injury. Repeated over many months or years, this leads to the chronic inflammatory process of lipodermatosclerosis. The microvascular changes in the skin are characterised by activated endothelium and perivascular inflammatory cells. Conclusion: There is evidence of leucocyte involvement in the pathogenesis of venous ulceration. The exact mechanisms remain to be resolved. Improved treatment for patients may be devised with

a better understanding of the basic causes of this condition. ACCESSION NUMBER: 96304872 EMBASE

DOCUMENT NUMBER: 1996304872

The microcirculation in venous hypertension.

AUTHOR: Coleridge Smith P.D.

Department of Surgery, UCL Medical School, The Middlesex CORPORATE SOURCE:

Hospital, Mortimer Street, London W1N 8AA, United Kingdom

Cardiovascular Research, (1996) 32/4 (789-795).

ISSN: 0008-6363 CODEN: CVREAU

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 002 Physiology

018 Cardiovascular Diseases and Cardiovascular Surgery

LANGUAGE: English SUMMARY LANGUAGE: English

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L1

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L9

TITLE:

SOURCE:

(FILE 'HOME' ENTERED AT 15:53:22 ON 16 MAR 2005)

FILE 'MEDLINE, JAPIO, BIOSIS, WPIDS, JICST-EPLUS, BIOTECHDS, HCAPLUS, SCISEARCH, CEN, CEABA-VTB, BIOBUSINESS, EMBASE, DGENE ENTERED AT 15:54:03 ON 16 MAR 2005

1 S LACTOFERRIN AND (REDUCE CIRCULATING LEVELS OF CHOLESTEROL?)

O S LACTOFERRIN COMPOSITION ADJ2 ADMINISTRATION

18 S LACTOFERRIN COMPOSITION

26082 S LACTOFERRIN L4

0 S L4 AND (REDUCE VASCULAR INFLAMMATION?)

25 S HEART DISEASE AND L4

205 S L4 AND DIABETES L7 L8

51 S L4 AND HYPERTENSION

38 S L7 AND TREATMENT

16 S L8 AND TREATMENT L10

=> s lactoferrin adj2 cholesterol

O LACTOFERRIN ADJ2 CHOLESTEROL

=> d l4 and therapy

'AND' IS NOT A VALID FORMAT

'THERAPY' IS NOT A VALID FORMAT.

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT): end

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1555 L4 AND THERAPY

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=> s 14 and heart

L14267 L4 AND HEART

=> s 114 and 113

L15 33 L14 AND L13

=> s 115 and 112

8 L15 AND L12 L16

L16 ANSWER 1 OF 8 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

II Radio-labelling a biomolecule useful for treatment of e.g.

cancer involves contacting biomolecule with radionuclide in presence of weak transfer ligand.

AN 2003-689623 [65] WPIDS

AB WO2003068270 A UPAB: 20031009

NOVELTY - Radio-labelling a biomolecule involves contacting the biomolecule with radionuclide in the presence of a weak transfer ligand.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for;

- (1) a kit comprising a biomolecule, radionuclide and a weak transfer ligand and optionally a set of written instructions;
 - (2) a radionuclide-labelled product;
- (3) a product comprising technetium labelled iron transport protein (preferably lactoferrin) coupled to a chemotherapeutic agent;
- (4) a composition comprising lactoferrin, radiolabelled lactoferrin or technetium labelled lactoferrin coupled to a chemotherapeutic agent;
- (5) diagnosing the presence of a tumor involving administering a technetium labelled **lactoferrin** product and imaging the labelled product in the body; and
- (6) treatment of tumor involving administering a composition comprising a chemotherapeutic or gene therapy agent coupled to technetium labelled transferrin or lactoferrin.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - None given.

USE - In the manufacture of a medicament for the **treatment** of cancer and tumor (claimed) e.g. breast cancer, bladder carcinoma, lung and **heart** tumor.

ADVANTAGE - The method removes extraneous radionuclide material, leading to high labelling efficiencies and pure radionuclide-labelled materials and improves purity of radio-labelled. $Dwg.\,0/11$

ACCESSION NUMBER:

2003-689623 [65] WPIDS

DOC. NO. CPI:

C2003-189108

TITLE:

Radio-labelling a biomolecule useful for treatment of e.g. cancer involves contacting biomolecule with radionuclide in presence of weak

transfer ligand.

DERWENT CLASS:

B04 K08

INVENTOR(S):

SMITH, T; WALTON, P

PATENT ASSIGNEE(S):

(VIST-N) VISTATEC YORK LTD

COUNTRY COUNT:

103

MC MK NL PT RO SE SI SK TR

PATENT INFORMATION:

| PAT | rent | NO | | | KI | ND I | TAC | Ξ | WEEK | | | | LA | 1 | PG | | | | | | | | |
|-----|------|----------|------|--------|------------|------|------|-----|---------------------|------|------------------|------|---------------------|----|----|----|----|----|----|----|----|----|----|
| WO | 200 | 3068 | 3270 | · 0 | A1 | 200 | 0308 | 321 | (20 | 0036 | 55) ¹ | * E1 | 1 | 22 | - | | | | | | | | |
| | RW: | ΑT | BE | BG | CH | CY | CZ | DE | DK | EΑ | EE | ES | FI | FR | GB | GH | GM | GR | HU | ΙE | IT | KE | LS |
| | | LU | MC | MW | MZ | NL | OA | PT | SD | SE | SI | SK | SL | sz | TR | TZ | UG | ZM | ZW | | | | |
| | W : | ΑE | AG | AL | AM | AT | ΑU | ΑZ | BA | BB | ВG | BR | BY | BZ | CA | CH | CN | CO | CR | CU | CZ | DE | DK |
| | | DM | DZ | EC | ΕĒ | ES | FΙ | GB | GD | GE | GH | GM | HR | HU | ID | IL | IN | IS | JΡ | KE | KG | ΚP | KR |
| | | ΚZ | LC | LK | LR | LS | LT | LU | LV | MA | MD | MG | MK | MN | MW | MX | ΜZ | NO | NZ | OM | PH | PL | PT |
| | | RO | RU | SC | SD | SE | SG | SK | SL | TJ | TM | TN | TR | TT | TZ | UA | UG | US | UZ | VC | VN | YU | ZA |
| | | ZM | zw | | | | | | | | | | | | | | | | | | | | |
| GB | 238 | 860 | 5 | | Α | 200 | 031: | 119 | (20 | 04(|)1) | | | | | | | | | | | | |
| ΑÜ | 200 | 324 | 569 | 1 | A 1 | 200 | 0309 | 904 | (20 | 042 | 28) | | | | | | | | | | | | |
| EP | 148 | 2988 | 3 | | A1 | 200 | 0412 | 208 | (20 | 048 | 30) | Eì | 1 | | | | | | | | | | |
| | R: | AL | AT | BE | ВG | CH | CY | CZ | DE | DK | EΕ | ES | FΙ | FR | GB | GR | HU | ΙE | ΙT | LI | LT | LU | LV |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|------|---------------|----------|
| | | | |
| WO 2003068270 | A1 | WO 2003-GB548 | 20030207 |

GB 2388605 A GB 2003-3005 20030211
AU 2003245691 A1 AU 2003-245691 20030207
EP 1482988 A1 EP 2003-739552 20030207
WO 2003-GB548 20030207

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---------------|-------------|---------------|
| AU 2003245691 | A1 Based on | WO 2003068270 |
| EP 1482988 | A1 Based on | WO 2003068270 |

PRIORITY APPLN. INFO: GB 2002-15511 20020705; GB 2002-3330 20020212

L16 ANSWER 2 OF 8 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI New probiotic nutritional preparation comprising Bifidobacterium,
Enterococcus faecium and Lactobacillus is useful for treating
gastrointestinal disorders.

AN 1999-192461 [17] WPIDS

AB EP 904784 A UPAB: 20011203

NOVELTY - The nutritional preparation with health promoting action, especially for treating gastrointestinal tract disorders comprises 106-1014(especially 107-1013) viable cells (especially Bifidobacterium, Enterococcus faecium and a Lactobacillus strain that predominantly produces dextro-rotatory lactate) /g of total preparation.

ACTIVITY - Antiinflammatory; antibiotic; antidiarrheic; antifungal; antiviral; antirheumatic.

MECHANISM OF ACTION - Immuno stimulant; heart and blood circulation stimulant

USE - The nutritional preparation is useful:

- (1) in the form of a food supplement preferably comprising a freeze-dried preparation of the microorganisms; and
- (2) in the form of a food composition ready for consumption obtained by either:
 - (i) mixing the microorganisms with a suitable food or food base;
- (ii) cultivating the microorganisms in a suitable food or food base;
- (iii) adding a supplement (as above) to a suitable food or food base (all claimed).

The nutritional preparation is useful in preventing and treating gastrointestinal tract disorders e.g. gastrointestinal infections, diarrhea, systemic infections or disturbances in the immune system especially those caused by pathogens e.g. enterotoxigenic E. coli strains, rotaviruses, Clostridia, Salmonella and/or Campylobacter sp. and further for the therapy and prophylaxis of IBS, Crohn's disease, cancer of the GI tract, impaired immune function against bacteria, fungi (e.g. Candida albicans), yeasts and/or viruses, obstipation, antibiotics therapy or radiotherapy and/or disorders of the heart or blood circulation, acute rheumatics and/or vaginitis. No specific examples given.

ADVANTAGE - Encapsulation of the microorganisms enable improved shelf-life of over two years especially to food products which are ready for consumption and are entirely safe as a food supplement. Encapsulation can also improve further the resistance against stomach acids and/or pancreatic fluid. The nutritional preparation prevents colonisation of harmful organisms after the **treatment** has ended or for restoring the gastrointestinal flora after antibiotic **treatment** and comprises different microorganisms that colonise and grow in different parts of the gastrointestinal tract therefore providing overall **treatment**.

Dwg.0/0

ACCESSION NUMBER:

1999-192461 [17] WPIDS

DOC. NO. CPI:

C1999-056688

TITLE:

New probiotic nutritional preparation comprising

Bifidobacterium, Enterococcus faecium and Lactobacillus

is useful for treating gastrointestinal disorders.

DERWENT CLASS:

B04 D13 D16

INVENTOR(S): HAGEMAN, R J J; VAN HOEY-DE-BOER, K A

PATENT ASSIGNEE(S): (NUTR-N) NUTRICIA NV

COUNTRY COUNT:

18

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG
EP 904784 Al 19990331 (199917) * EN 9

R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE | | | |
|-----------|------|----------------|----------|--|--|--|
| | | | | | | |
| EP 904784 | A1 | EP 1997-202900 | 19970922 | | | |

PRIORITY APPLN. INFO: EP 1997-202900 19970922

L16 ANSWER 3 OF 8 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
Use of human apo-lactoferrin and peptides derivable from human
lactoferrin for the production of composition useful for e.g.
treating and preventing vascular disease;

human apo-lactoferrin for use in disease therapy

AN 2003-25156 BIOTECHDS

DERWENT ABSTRACT:

AΒ

NOVELTY - In the production of a composition, a substance containing human apo-lactoferrin and/or peptides derivable from human lactoferrin and/or its natural metabolites or equivalent analogs is used.

ACTIVITY - Antianginal; Cerebroprotective; Cardiant; Antiulcer; Antialopecia.

MECHANISM OF ACTION - VEGF165 induced angiogenesis inhibitor. Lactoferrin, dissolved in saline, was given by tube feeding twice daily from Sunday afternoon (Day-1) to Friday afternoon (Day 4). Vehicle controls received saline by tube feeding. The angiogenesis treatment with VEGF was given intraperitoneally on Days 0 - 4 (twice daily). The results for test/control groups were vascularized area = 12.09+/-1.49/1.18+/-0.5, microvascular length = 1.465+/-0.077/0.28+/-0.04, and total microvascular length = 17.72+/-2.19/0.33+/-0.14 respectively. The results demonstrated that oral administration of apo-hLE significantly enhanced the VEGF mediated angiogenic response.

USE - For treating and/or preventing vascular disease and/or states of tissue hypoperfusion (including impending or manifested stroke, ischemic heart disease e.g. angina pectoris or impending or manifested myocardial infarction), or peripheral artery occlusive disease with or without impending gangrene and/or state of depressed VEGF induced angiogenesis associated with peptic ulcer, leg ulcer or local or generalized hair loss) with hypoxia and/or ischemic consequences (claimed).

ADMINISTRATION - The route of administration is oral, parenteral, local or by inhalation. No dosage given.

ADVANTAGE - The method is used in as an alternative to bypass surgery or any therapeutic angiogenesis options.

EXAMPLE - No relevant example given. (14 pages)

ACCESSION NUMBER: 2003-25156 BIOTECHDS

TITLE: Use of human apo-lactoferrin and peptides derivable

from human lactoferrin for the production of

composition useful for e.g. treating and preventing vascular

disease;

human apo-lactoferrin for use in disease

therapy

AUTHOR: NORRBY K
PATENT ASSIGNEE: NORRBY K

PATENT INFO: WO 2003072129 4 Sep 2003 APPLICATION INFO: WO 2003-SE329 27 Feb 2003

PRIORITY INFO: SE 2002-598 27 Feb 2002; SE 2002-598 27 Feb 2002

DOCUMENT TYPE: Patent LANGUAGE: English

ΤI

AB

OTHER SOURCE: WPI: 2003-712670 [67]

L16 ANSWER 4 OF 8 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

Radio-labelling a biomolecule useful for treatment of e.g.

cancer involves contacting biomolecule with radionuclide in presence of weak transfer ligand;

radionuclide label for chemotherapy or gene therapy

AN 2003-24609 BIOTECHDS

DERWENT ABSTRACT:

NOVELTY - Radio-labelling a biomolecule involves contacting the biomolecule with radionuclide in the presence of a weak transfer ligand.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for; (1) a kit comprising a biomolecule, radionuclide and a weak transfer ligand and optionally a set of written instructions; (2) a radionuclide-labelled product; (3) a product comprising technetium labelled iron transport protein (preferably lactoferrin) coupled to a chemotherapeutic agent; (4) a composition comprising lactoferrin, radiolabelled lactoferrin or technetium labelled lactoferrin coupled to a chemotherapeutic agent; (5) diagnosing the presence of a tumor involving administering a technetium labelled lactoferrin product and imaging the labelled product in the body; and (6) treatment of tumor involving administering a composition comprising a chemotherapeutic or gene therapy agent coupled to technetium labelled transferrin or lactoferrin.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - None given.

USE - In the manufacture of a medicament for the **treatment** of cancer and tumor (claimed) e.g. breast cancer, bladder carcinoma, lung and heart tumor.

ADMINISTRATION - The composition is administered as a single dose or repeatedly by intravenous, intramuscular, subcutaneous or oral route or is injected directly to the tumor site (claimed).

ADVANTAGE - The method removes extraneous radionuclide material, leading to high labelling efficiencies and pure radionuclide-labelled materials and improves purity of radio-labelled.

EXAMPLE - A mixture of 2.8x10-7 mol dm-3 solution of thiourea (25 microl), 10-10 mol dm1-3 solution of SnCl2 (25 microl), pertechnetate (50 microl) obtained from (99m)Tc generator and transferin (25 microl) was taken in a glass vial. The mixture was incubated for 1 hour at 37degreesC followed by addition of phosphate buffered saline (0.85 microl). The solution was further maintained at 37 degrees C for 15 minutes to obtained a radiolabelled biomolecule. (22 pages)

ACCESSION NUMBER: 2003-24609 BIOTECHDS

TITLE: Radio-labelling a bio

Radio-labelling a biomolecule useful for treatment of e.g. cancer involves contacting biomolecule with radionuclide in presence of weak transfer ligand; radionuclide label for chemotherapy or gene

therapy

AUTHOR: WALTON P; SMITH T PATENT ASSIGNEE: VISTATEC YORK LTD

PATENT INFO: WO 2003068270 21 Aug 2003 APPLICATION INFO: WO 2003-GB548 7 Feb 2003

PRIORITY INFO: GB 2002-15511 5 Jul 2002; GB 2002-3330 12 Feb 2002

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2003-689623 [65]

L16 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Nucleic acid compositions, kits, and methods for identification, assessment, prevention, and **therapy** of human breast cancer

AB The invention relates to nucleic acid marker compns., kits and methods for detecting, characterizing, preventing, and treating human breast cancers. A variety of markers are provided, wherein changes in the levels of expression of one or more of the nucleic acid markers is correlated with the presence of breast cancer. The level of expression of numerous potential markers was measured in cells obtained from breast cancer tissue

samples obtained form fifteen patients afflicted with breast cancer and from eleven breast cancer cell cultures, based on comparison with expression levels of each marker in corresponding non-cancerous breast tissue and cell cultures. The 15 cancer tissue samples include (i) five invasive lobular carcinomas (ILC), (ii) five invasive ductal carcinomas (IDC), and (iii) five samples of ductal carcinoma in situ (DCIS). As an addnl. evaluation of ability to indicate breast cancer, individual markers that were identified by transcriptional profiling criteria were also tested in six different subtracted library expts. In addition, protein profiling expts. were undertaken to assess whether the proteins associated with the expression of individual markers of the invention are secreted. Table 21 lists approx: 43,500 GenBank Accession Nos. from the present invention. [This abstract record is one of 8 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

ACCESSION NUMBER:

2001:863850 HCAPLUS

DOCUMENT NUMBER:

136:32755

TITLE:

Nucleic acid compositions, kits, and methods for

identification, assessment, prevention, and

therapy of human breast cancer

INVENTOR(S):

Lillie, James; Palermo, Adam; Wang, Youzhen;

Steinmann, Kathleen; Elias, Josh

PATENT ASSIGNEE(S):

Millennium Predictive Medicine, Inc., USA

SOURCE:

PCT Int. Appl., 2674 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

| PATI | PATENT NO. | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
|----------|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------------|----------------------|---|---|---|--------------------------|-------------------|----------------------------|---|--------------------------|-------------------|
| WO 2 | WO 2001046697 A2 | | | 2 | 20010628 | | | W | 200 | 00-US | 5352 | 20001221 | | | | | |
| W : | CU, IL, MD, | CZ, IN, MG, | DE, IS, MK, | DK, JP, MN, | DM, KE, MW, | DZ, KG, MX, | AZ, EE, KP, MZ, TZ, | ES, KR, NO, | FI, KZ, NZ, | GB, LC, PL, | GD, LK, PT, | GE, LR, RO, | GH, LS, RU, | GM, LT, SD, | HR, LU, SE, | HU, LV, SG, | ID, MA, SI, |
| | AT, GR, | BE, IE, | BF, IT, | LU, | CF, | CG, | CH, MR, | | NL, | PT, | SE, | SN, | TD, | TG, | TR | GA, | GB, |
| PRIORITY | CIORITY APPLN. INFO.: | | | | | | | US US US US | 5 200 5 200 5 200 5 200 5 200 | 79 - 00 79 - 00 79 - 00 79 - 00 79 - 00 | /1764 /1904 /1934 /2052 /2132 | 123 171 182 231 | | 20 20 20 20 20 | 99912 00003 00003 00005 00006 | 114 317 329 515 | |

- L16 ANSWER 6 OF 8 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
- TI Idiopathic pulmonary hemosiderosis in adults.
- AB Idiopathic pulmonary hemosiderosis is a rare interstitial lung disease of unknown etiology, characterized by recurrent episodes of diffuse alveolar hemorrhage. It is most often seen in children, but an adult type has also been described. A constellation of cough, hemoptysis, dyspnea, pulmonary infiltrates, and anemia suggests a diagnosis of diffuse alveolar hemorrhage. Sputum and bronchoalveolar lavage examination show numerous hemosiderin-laden macrophages (siderophages), while the lung biopsy confirms a bland alveolar hemorrhage, variable degrees of interstitial fibrosis, and intraalveolar/interstitial siderophages. The treatment of choice consists of immunosuppressive agents, including corticosteroids, for both acute exacerbations and remission periods. With the advent of more effective immunosuppressive agents, long-term disease-free periods and better survival have been described. Terminology: Hemosiderin (Gr. hemo blood + Gr. sideros iron)-an intracellular storage form of iron, found as golden-yellow or brown-yellow granules containing a complex of ferric hydroxides, polysaccharides, and proteins. It contains >33% iron by weight and stains blue with Perls'

Prussian stain. Hemosiderosis-a focal or general increase in tissue iron stores, especially in local macrophages. Pulmonary Hemosiderosis - the deposition of abnormal amounts of hemosiderin in the lungs, especially in the alveolar macrophages and interstitium, due to recurrent alveolar hemorrhage episodes. Can be due to various conditions (congestive heart failure, valvulopathies, vasculitides, etc). Idiopathic Pulmonary Hemosiderosis (Heiner-Ceelen disease) -repeated, sudden attacks of dyspnea, hemoptysis, diffuse alveolar bleeding, and anemia, seen mostly in children but also in adults. Hemochromatosis (Gr. hemo + Gr. chromatosis, staining, discoloration) - a disorder due to deposition of hemosiderin in the parenchymal cells, causing tissue damage of the liver, pancreas, heart, and pituitary. Siderosis (Gr. sideros + Gr. -osis, condition)-(1) pneumoconiosis siderotica, a form of pneumoconiosis due to the presence of iron dust, usually serious when combined with silica exposure (silicosiderosis); (2) hemosiderosis; (3) hyperferremia. Siderophage (Gr. sideros + Gr. phagos, ingestion)-a macrophage laden with phagocytosed iron-containing particles. Siderophillin-nonheme iron-binding proteins: transferrin (in vertebrate blood), lactoferrin (in mammalian milk and other secretions), conalbumin, and ovotransferrin (in avian blood and egg white).

ACCESSION NUMBER: 2005043129 EMBASE

TITLE: Idiopathic pulmonary hemosiderosis in adults.

AUTHOR: Ioachimescu O.C.; Kotch A.; Stoller J.K.

CORPORATE SOURCE: Dr. O.C. Ioachimescu, 9500 Euclid Ave., Cleveland, OH

44195, United States. oioac@yahoo.com

SOURCE: Clinical Pulmonary Medicine, (2005) 12/1 (16-25).

Refs: 116

ISSN: 1068-0640 CODEN: CPMEF2

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

L16 ANSWER 7 OF 8 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.

ΤI Diagnostic and therapeutic strategies in the irritable bowel syndrome. AB The management of patients with irritable bowel syndrome (IBS) is a frequent, yet challenging task in both primary care and gastroenterology practice. A diagnostic strategy guided by keen clinical judgment should focus on positive symptom criteria and on the absence of alarm symptoms. In younger patients lacking alarm features, invasive testing has a low-yield. The presence of food intolerance and underlying celiac disease should be excluded. The usefulness of fecal tests such as calprotectin and lactoferrin to exclude organic bowel disease is not adequately established. In patients with moderate to severe symptoms who fail initial therapeutic trials, further tests can be performed in tertiary care settings, such as transit measurement and tests for diagnosing pelvic floor dysfunction. Treatment strategies for IBS are currently directed at the predominant symptoms. In diarrhea-predominant IBS, opioids (e.g. loperamide) and the 5-HT(3) receptor antagonist alosetron are efficacious. In constipation-predominant IBS, fiber and bulk laxatives are traditionally used, but their efficacy is variable and may worsen symptoms. The 5-HT(4) receptor agonist tegaserod is efficacious in female patients with IBS and constipation. In patients with IBS and abdominal pain, antispasmodics and antidepressants can be used, with the best evidence supporting the prescription of tricyclic antidepressants. The efficacy of psychological treatments in terms of relieving the symptoms of IBS is still uncertain. Limited evidence suggests that anti-enkephalinase agents, somatostatin analogues, $\alpha(2)$ -receptor agonists, opioid antagonists, selective serotonin reuptake inhibitors, probiotics and herbal treatments may be useful in IBS patients.

ACCESSION NUMBER: 2004483915 EMBASE

TITLE: Diagnostic and therapeutic strategies in the irritable

bowel syndrome.

AUTHOR: Cremonini F.; Talley N.J.

CORPORATE SOURCE: Dr. N.J. Talley, Department of Medicine, Mayo Clinic

College of Medicine, 200 First Street S.W., Rochester, MN

55905, United States. Talley Nicholas@mayo.edu

Minerva Medica, (2004) 95/5 (427-441). SOURCE:

Refs: 128

ISSN: 0026-4806 CODEN: MIMEAO

COUNTRY:

Italy

DOCUMENT TYPE:

Journal; General Review

FILE SEGMENT:

Drug Literature Index 037

038 Adverse Reactions Titles

048 Gastroenterology

LANGUAGE:

English

SUMMARY LANGUAGE:

English; Italian

ANSWER 8 OF 8 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. L16

on STN

TI Heparin-coated cardiopulmonary bypass equipment. I. Biocompatibility markers and development of complications in a high-risk population.

AB Objectives: 1. To study possible clinical benefits of heparin-coated cardiopulmonary bypass in patients with a broad range of preoperative risk factors. 2. To evaluate the correlation between the terminal complement complex and clinical outcome. 3. To identify clinical predictors of complement activation and correlates of granulocyte activation during cardiac surgery. Methods: Blood samples from adults undergoing elective cardiac surgery with Duraflo II heparin-coated (n = 81) or uncoated (n = 81) 75) cardiopulmonary bypass sets (Duraflo coating surface; Baxter International, Inc, Deerfield, III) were analyzed for activation of complement (C3 activation products, terminal complement complex), granulocytes (myeloperoxidase, lactoferrin), and platelets $(\beta\text{-thromboglobulin})$ by enzyme immunoassays. Preoperative risk was assessed by means of the 'Higgins' score.' Complications (cardiac, renal, pulmonary, gastrointestinal, and central nervous system dysfunction, infections, death) were registered prospectively. Data were analyzed by analysis of variance, logistic regression, and linear regression. Results and conclusions: Sixty-seven percent of the patients had predefined risk factors. Complications developed in 53 patients (34%), equivalently with and without heparin-coated bypass sets (P = .44-.82), despite a significant reduction in complement and granulocyte activation by heparin coating. No clear-cut relationship between the terminal complement complex and outcome was found, even if it was significant in the models for renal and central nervous system dysfunction and infections (P = .006). The Higgins' score was significantly related to complement activation (P < .05). Approximately 50% of the variation in granulocyte activation was explained by complement (P \leq .01) and platelet activation (P <.05), heparin/protamine dose ratio (P = .02), duration of cardiopulmonary bypass (P < .01), and gender (P < .05). Therefore measures reducing complement activation alone will not necessarily reduce granulocyte activation sufficiently for clinical significance.

ACCESSION NUMBER: 1999125381 EMBASE

TITLE: Heparin-coated cardiopulmonary bypass equipment. I.

Biocompatibility markers and development of complications

in a high-risk population.

AUTHOR: Videm V.; Mollnes T.E.; Fosse E.; Mohr B.; Bergh K.; Hagve

T.-A.; Aasen A.O.; Svennevig J.L.

CORPORATE SOURCE: Dr. V. Videm, Department of Immunology, Blood Bank,

Regional Hospital, N-7006 Trondheim, Norway

Journal of Thoracic and Cardiovascular Surgery, (1999) SOURCE:

117/4 (794-802).

Refs: 28

ISSN: 0022-5223 CODEN: JTCSAQ

COUNTRY:

United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT:

015 Chest Diseases, Thoracic Surgery and Tuberculosis 018 Cardiovascular Diseases and Cardiovascular Surgery

027 Biophysics, Bioengineering and Medical

Instrumentation

037 Drug Literature Index

LANGUAGE: SUMMARY LANGUAGE: English English

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             O DECREASE TRIGLYCERIDE AND L4
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=> s decrease VLDL and 14
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             0 DECREASE VLDL AND L4
=> s (C-reactive protein) and 14
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L20 210 (C-REACTIVE PROTEIN) AND L4 => d 120 ti abs ibib 1-15 L20 ANSWER 1 OF 210 MEDLINE on STN Early release of neutrophil markers of activation after direct stenting in TΙ patients with unstable angina. OBJECTIVE: To assess polymorphonuclear neutrophils activation after AΒ stenting in acute coronary syndromes studied by myeloperoxydase, lactoferrin and elastase release in this clinical setting. METHODS: Myeloperoxydase, lactoferrin, elastase, Creactive protein and cytokines serum levels were assessed in 20 patients undergoing catheterization for unstable angina. Serial sampling starting before arteriography and continued up to 24 h was carried out in 15 patients undergoing direct stenting (group A) and in five patients assessed by coronary angiography only (group B). RESULTS: Myeloperoxydase, lactoferrin and elastase levels remained unchanged following catheterization, whereas a significant increase in myeloperoxydase (P=0.0009) and lactoferrin (P=0.004) was observed after stenting. No change in levels of tumour necrosis factor alpha, interleukin (IL)-8 and IL-11 was found in group B after catheterization at the different sampling times, although IL-8 and IL-11 levels increased transiently following stenting. IL-6 values increased in both groups. Baseline values of C-reactive protein were similar in each group. A progressive increase in C-reactive protein was noted in both groups and appeared to be larger following stenting (group A: P=0.0002; group B: P=0.01). CONCLUSIONS: In patients with unstable angina, stenting is associated by immediate neutrophil activation followed by release of inflammatory cytokines (IL-6, IL-8, IL-11) and c-reactive protein elevation. This study points out a potential role of myeloperoxydase as a trigger for inflammatory reaction in patients with unstable coronary syndromes undergoing percutaneous coronary intervention. ACCESSION NUMBER: 2005026124 IN-PROCESS DOCUMENT NUMBER: PubMed ID: 15654202 TITLE: Early release of neutrophil markers of activation after direct stenting in patients with unstable angina. AUTHOR: Gach Olivier; Biemar Christian; Nys Monique; Deby-Dupont Ginette; Chapelle Jean-Paul; Deby Carol; Lamy Maurice; Pierard Luc A; Legrand Victor Centre Hospitalier Universitaire du Sart-Tilman, Service de CORPORATE SOURCE:

Cardiologie, Liege, Belgium.

SOURCE:

Coronary artery disease, (2005 Feb) 16 (1) 59-65.

Journal code: 9011445. ISSN: 0954-6928.

PUB. COUNTRY:

England: United Kingdom

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

NONMEDLINE; IN-DATA-REVIEW; IN-PROCESS; NONINDEXED;

Priority Journals

ENTRY DATE:

Entered STN: 20050119

Last Updated on STN: 20050119

L20 MEDLINE on STN ANSWER 2 OF 210

TI The inflammatory response in mild and in severe psoriasis.

AB BACKGROUND: Psoriasis is a chronic and recurrent inflammatory skin disease. The inflammatory response represents a fundamental ability of the organism to protect itself from infectious agents and from injury. OBJECTIVES: To evaluate the inflammatory response in mild and in severe psoriasis, to evaluate the endogenous systems counterbalancing the deleterious effects of the inflammation products, and to establish values of prognostic significance. METHODS: The study was performed in a control group (n = 40) and in 60 patients with psoriasis vulgaris, half presenting with mild psoriasis, and the other half with severe psoriasis. evaluated total and differential leucocyte count; elastase, lactoferrin and lipid peroxidation as markers of neutrophil activation; total plasma antioxidant capacity (TAS), transferrin, ceruloplasmin, alpha(1)-antitrypsin and alpha(2)-macroglobulin as markers

of the endogenous antioxidant and antiprotease systems; and fibrinogen, erythrocyte sedimentation rate, **C-reactive**

protein (CRP), haptoglobin, C3 and C4 complement proteins as markers of inflammation. RESULTS: Our data suggested that psoriasis is an inflammatory condition in which neutrophils seem to play a crucial role by contributing to the development of oxidative and proteolytic stress. The worsening of the disease seemed to be linked to the enhancement of the inflammatory response and of the imbalance between neutrophil activation products and their inhibitors. CONCLUSIONS: We propose values for elastase, CRP, elastase/alpha(2)-macroglobulin, elastase/alpha(1)-antitrypsin, thiobarbituric acid/TAS and elastase/neutrophil ratios with prognostic significance for the worsening of psoriasis.

ACCESSION NUMBER: 2004251129 MEDLINE DOCUMENT NUMBER: PubMed ID: 15149504

TITLE: The inflammatory response in mild and in severe psoriasis.

AUTHOR: Rocha-Pereira P; Santos-Silva A; Rebelo I; Figueiredo A;

Quintanilha A; Teixeira F

CORPORATE SOURCE: Departamento de Quimica da Universidade da Beira Interior,

Rua Marques d'Avila e Bolama, 6200 Covilha, Portugal..

petrorp@ciunix.ubi.pt

SOURCE: British journal of dermatology, (2004 May) 150 (5) 917-28.

Journal code: 0004041. ISSN: 0007-0963.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200407

ENTRY DATE: Entered STN: 20040520

Last Updated on STN: 20040716 Entered Medline: 20040715

L20 ANSWER 3 OF 210 MEDLINE on STN

TI Azurocidin-specific-ANCA-related idiopathic necrotizing crescentic glomerulonephritis.

An 80-year-old woman who had rapidly progressive glomerulonephritis unaccompanied by systemic vasculitis is described. On renal biopsy, she showed necrotizing crescentic glomerulonephritis by light microscopy and pauci-immune glomerular lesions by immunofluorescent study. No dense deposits were present on electronmicroscopic study. On serum examination, indirect immunofluorescent study showed perinuclear pattern antineutrophil cytoplasmic antibody (ANCA), but myeloperoxidase-ANCA and proteinase 3-ANCA were both negative. Her serum reacted only to azurocidin excluding other ANCA antigens: bactericidal permeability-increasing protein, cathepsin G, elastase, lactoferrin, or lysozyme. Serum creatinine level decreased, and C-reactive

protein turned negative after steroid therapy. Azurocidin-ANCA
also turned negative. It is suggested that azurocidin-ANCA might have
been related to the inflammatory process of pauci-immune necrotizing
crescentic glomerulonephritis in this patient.

ACCESSION NUMBER: 2004147761 MEDLINE DOCUMENT NUMBER: PubMed ID: 15042565

TITLE: Azurocidin-specific-ANCA-related idiopathic necrotizing

crescentic glomerulonephritis.

AUTHOR: Kimura Rio; Matsuzawa Naoki; Arimura Yoshihiro; Soejima

Akinori; Nakabayashi Kimimasa; Yamada Akira

CORPORATE SOURCE: First Department of Internal Medicine, Kyorin University

School of Medicine, Tokyo, Japan.. rio@ac.catv.ne.jp

American journal of kidney diseases : official journal of

the National Kidney Foundation, (2004 Apr) 43 (4) e7-10.

Journal code: 8110075. ISSN: 1523-6838.

PUB. COUNTRY: United States DOCUMENT TYPE: (CASE REPORTS)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

SOURCE:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200406

ENTRY DATE: Entered STN: 20040326

Last Updated on STN: 20040617

Entered Medline: 20040616

L20 ANSWER 4 OF 210 MEDLINE on STN

TI C-reactive protein and antibacterial

activity in blood plasma of colostrum-fed calves and the effect of lactulose.

AB Several milk proteins are very important for immunological defense and can be absorbed in the intestine of calves in the first hours after birth. The influence of colostrum intake and the effect of additional lactulose application on the concentration of **C-reactive**

protein (CRP) in blood were investigated. The CRP is known as a mediator of innate immunity. Results were compared to the bovine acute phase protein haptoglobin, and to lactalbumin, lactoferrin, and immunoglobulins in plasma from calves. After colostrum intake, the concentration of most proteins were strongly increased. The data show, for the first time, a significant increase of CRP in the blood of calves 1 d after colostrum intake (nonlactulose group, n = 10), and an even more significant increase in CRP concentration (1 d postpartum) was measured in the group of animals with additional application of lactulose (lactulose group, n = 10) when compared to the nonlactulose group. In an in vitro assay with the plasma of these animals, an increased bactericidal activity was detected against Morganella morganii (1 d postpartum) in both groups, but again a higher activity occurred in the lactulose group. The results of these investigations emphasize the importance of colostrum intake during the first hours after birth for the defense potential of newborn calves. In addition, lactulose may have a positive effect in the period of passive transfer of colostrum proteins and in the immune defense.

ACCESSION NUMBER: 2003515885 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14594250
TITLE: C-reactive protein and

antibacterial activity in blood plasma of colostrum-fed

calves and the effect of lactulose. Schroedl W; Jaekel L; Krueger M

CORPORATE SOURCE: Institute of Bacteriology and Mycology, Veterinary Faculty,

University of Leipzig, Leipzig, Germany 04103...

schroedl@rz-uni-leipziq.de

SOURCE: Journal of dairy science, (2003 Oct) 86 (10) 3313-20.

Journal code: 2985126R. ISSN: 0022-0302.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

AUTHOR:

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200312

ENTRY DATE: Entered STN: 20031104

Last Updated on STN: 20031220 Entered Medline: 20031219

L20 ANSWER 5 OF 210 MEDLINE on STN

TI Neutrophil activation and C-reactive protein concentration in preeclampsia.

AB Preeclamptic pregnancies seem to be associated with a higher extent of inflammation compared with normal ones. We intended to test this proposal and also to clarify the contribution of some variables in such inflammatory process. We measured total and differential leukocyte count, serum C-reactive protein (CRP), and plasma

levels of lactoferrin, elastase, and granulocyte-macrophage colony-stimulating factor (GM-CSF). Uric acid was also evaluated and used as an indicator of the severity of the disease. A cross-sectional study was performed by evaluating healthy and preeclamptic women in the third trimester of gestation (n = 67 and n = 51, respectively) and 24 to 48 h postpartum (n = 32 and n = 26, respectively). When comparing the third trimester of normal and preeclamptic pregnancies, we found significantly higher levels of uric acid, CRP, and elastase, and a significantly higher elastase to neutrophil ratio in the pathologic group. However, for CRP, statistical significance was lost after adjustment for maternal weight. No significant differences were found in total leukocyte count, plasma levels of GM-CSF, and lactoferrin between groups. In preeclampsia, a significant positive correlation was found between

elastase and lactoferrin and these neutrophil activation products correlated positively with uric acid level. Considering the analysis of all variables in the postpartum period, only CRP and uric acid levels were significantly elevated in the pathologic group. However, CRP differences obtained in the puerperium seem to be influenced by the increased number of dystocic deliveries in the preeclamptic group. In conclusion, our data suggest that inflammation is further pronounced in preeclampsia and that the extent of neutrophil activation correlates with the severity of this syndrome.

ACCESSION NUMBER: 2003375067 MEDLINE DOCUMENT NUMBER: PubMed ID: 12908997

TITLE: Neutrophil activation and C-reactive protein concentration in preeclampsia.

AUTHOR: Belo Luis; Santos-Silva Alice; Caslake Muriel; Cooney

Josephine; Pereira-Leite Luis; Quintanilha Alexandre;

Rebelo Irene

CORPORATE SOURCE: Department of Biochemistry, Faculty of Pharmacy, University

of Porto, Porto, Portugal.. luis_fbelo@yahoo.com
Hypertension in pregnancy: official journal of the

SOURCE: Hypertension in pregnancy : official journal of the International Society for the Study of Hypertension in

Pregnancy, (2003) 22 (2) 129-41.

Journal code: 9421297. ISSN: 1064-1955.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200311

ENTRY DATE: Entered STN: 20030812

Last Updated on STN: 20031218 Entered Medline: 20031126

L20 ANSWER 6 OF 210 MEDLINE on STN

TI Adaptive and inflammatory immune responses in patients infected with strains of Vibrio parahaemolyticus.

AΒ In patients with diarrhea caused by Vibrio parahaemolyticus, antibody-secreting cell responses to thermostable direct hemolysin (TDH), lipopolysaccharide (LPS), and whole-cell bacteria were seen. TDH- and LPS-specific responses were seen in serum samples, and immunoglobulin A antibody responses were observed in stool. Levels of Creactive protein and nitric oxide metabolites increased in the systemic circulation at the onset of illness. Tumor necrosis factor-alpha and lactoferrin levels were high during the acute stage in mucosal secretions and in plasma, whereas interleukin-1beta levels were high only in mucosal secretions. Duodenal and rectal biopsy specimens obtained at the onset of illness showed an acute inflammatory response. The lamina propria showed edema, congestion of blood vessels, and hemorrhage, with an increase in levels of polymorphonuclear neutrophils and macrophages. Strains belonging to different serotypes exhibited varying resistance to killing by serum; the O8:K21 strain was most sensitive. Infection with V. parahaemolyticus results in B cell responses and an acute inflammatory response that is self-limiting.

ACCESSION NUMBER: 2003144949 MEDLINE DOCUMENT NUMBER: PubMed ID: 12660923

TITLE: Adaptive and inflammatory immune responses in patients

infected with strains of Vibrio parahaemolyticus.

AUTHOR: Qadri Firdausi; Alam Muhammad Shamsul; Nishibuchi Mitsuaki;

Rahman Taufiqur; Alam Nur Haque; Chisti Jobayer; Kondo Seiichi; Sugiyama Junichi; Bhuiyan Nurul Amin; Mathan

Minnie M; Sack David A; Nair G Balakrish

CORPORATE SOURCE: International Centre for Diarrhoeal Disease Research,

Bangladesh, GPOBox 128, Dhaka 1000, Bangladesh...

fqadri@icddrb.org

SOURCE: Journal of infectious diseases, (2003 Apr 1) 187 (7)

1085-96. Electronic Publication: 2003-03-19.

Journal code: 0413675. ISSN: 0022-1899.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 20

ENTRY DATE: Entered STN: 20030328

Last Updated on STN: 20030501 Entered Medline: 20030430

L20 ANSWER 7 OF 210 MEDLINE on STN

TI Non-invasive investigation of inflammatory bowel disease.

AB The assessment of inflammatory activity in intestinal disease in man can be done using a variety of different techniques. These range from the use of non-invasive acute phase inflammatory markers measured in plasma such as C reactive protein (CRP) and the erythrocyte sedimentation rate (ESR) (both of which give an indirect assessment of disease activity) to the direct assessment of disease activity by intestinal biopsy performed during endoscopy in association with endoscopic scoring systems. Both radiology and endoscopy are conventional for the diagnosis of inflammatory bowel disease (IBD). However these techniques have severe limitations when it comes to assessing functional components of the disease such as activity and prognosis. Here we briefly review the value of two emerging intestinal function tests. Intestinal permeability, although ideally suited for diagnostic screening for small bowel Crohn's disease, appears to give reliable predictive data for imminent relapse of small bowel Crohn's disease and it can be used to assess responses to treatment. More significantly it is now clear that single stool assay of neutrophil specific proteins (calprotectin, lactoferrin) give the same quantitative data on intestinal inflammation as the 4 day faecal excretion of 111Indium labelled white cells. Faecal calprotectin is shown to be increased in over 95% of patients with IBD and correlates with clinical disease activity. It reliably differentiates between patients with IBD and irritable bowel syndrome. More importantly, at a given faecal calprotectin concentration in patients with quiescent IBD, the test has a

ACCESSION NUMBER: 2002198937 MEDLINE DOCUMENT NUMBER: PubMed ID: 11819811

TITLE: Non-invasive investigation of inflammatory bowel disease.

specificity and sensitivity in excess of 85% in predicting clinical

to the degree of intestinal inflammation and suggests that targeted treatment at an asymptomatic stage of the disease may be indicated.

relapse of disease. This suggests that relapse of IBD is closely related

AUTHOR: Tibble J A; Bjarnason I

CORPORATE SOURCE: Department of Medicine, Guy's, King's, St Thomas's Medical

School, Bessemer Road, London SE5 9PJ, UK.

SOURCE: World journal of gastroenterology: WJG, (2001 Aug) 7 (4)

460-5. Ref: 70

Journal code: 100883448. ISSN: 1007-9327.

PUB. COUNTRY: China

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200206

ENTRY DATE: Entered STN: 20020405

Last Updated on STN: 20020606 Entered Medline: 20020605

L20 ANSWER 8 OF 210 MEDLINE on STN

Increased levels of inflammatory mediators in children and adults infected with Vibrio cholerae O1 and O139.

AB Investigations were carried out to study the production of factors associated with the innate immune response in the systemic and mucosal compartments in adults and children infected with Vibrio cholerae O1 and V. cholerae O139. The levels of nonspecific mediators of the innate defense system, i.e., prostaglandin E(2) (PGE(2)), leukotriene B(4) (LTB(4)), and lactoferrin (Lf), as well as myeloperoxidase (MPO), were elevated at the acute stage of the disease in stools obtained from both O1- and O139-infected adults and children. In the systemic compartment, the levels of Lf were increased after onset of disease, which in children remained elevated up to convalescence compared to the healthy

controls. Increased concentrations of C-reactive protein were seen in the sera of adult cholera patients at the acute stage of infection. Elevated levels of the nitric oxide (NO*) metabolites (nitrite and nitrate [NO(2)(-) and NO(3)(-)]) were detected in plasma but not in urine. The activity of the scavenger of reactive oxygen species, superoxide dismutase, was higher in the plasma of adults immediately after the onset of disease, suggesting that an active scavenging of reactive oxygen species was taking place. The concentration of 8-iso-prostaglandin F(2 alpha) remained unchanged in the systemic and mucosal compartments in the study subjects. After the recovery of patients from cholera, the concentration of the majority of the metabolites decreased to baseline levels by day 30 after the onset of infection. Immunohistochemical staining showed increased tissue expression of MPO, Lf, and inducible nitric oxide synthase at the acute stage in the duodenal biopsies of adults and rectal biopsies obtained from children with cholera. Very little difference was seen in the levels of the different inflammatory mediators in patients infected with V. cholerae O1 or the encapsulated V. cholerae O139. In summary, these results suggest that elevated concentrations of Lf, MPO, PGE(2), LTB(4), and NO*, as well as other metabolites, during the acute stage of the disease indicate that the innate defense system, as well as the inflammatory process, is activated in both adults and pediatric patients infected with V. cholerae 01 and 0139.

ACCESSION NUMBER: 2002138905 MEDLINE DOCUMENT NUMBER: PubMed ID: 11874856

TITLE: Increased levels of inflammatory mediators in children and

adults infected with Vibrio cholerae O1 and O139.

AUTHOR: Qadri Firdausi; Raqib Rubhana; Ahmed Firoz; Rahman

Taufiqur; Wenneras Christine; Das Swadesh Kumar; Alam Nur

Haque; Mathan Minnie M; Svennerholm Ann-Mari

CORPORATE SOURCE: Centre for Health and Population Research, International

Centre for Diarrhoeal Disease Research, Bangladesh, Dhaka

1000, Bangladesh.. fqadri@icddrb.org

SOURCE: Clinical and diagnostic laboratory immunology, (2002 Mar) 9

(2) 221-9.

Journal code: 9421292. ISSN: 1071-412X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200206

ENTRY DATE: Entered STN: 20020305

Last Updated on STN: 20020612 Entered Medline: 20020611

L20 ANSWER 9 OF 210 MEDLINE on STN

TI Local inflammatory responses following bronchial endotoxin instillation in humans.

AΒ To study local lung inflammation, 34 subjects had endotoxin (1-4 ng/kg) instilled into a lung segment and saline instilled into a contralateral segment followed by bronchoalveolar lavage (BAL) at 2 h, 6 h, 24 h, or 48 Endotoxin instillation resulted in a focal inflammatory response with a distinct time course. An early phase (2 h to 6 h) revealed an increase in neutrophils (p = 0.0001) with elevated cytokines (tumor necrosis factor [TNF] -alpha, TNF receptors [TNFR], interleukin [IL] -1beta, IL-1 receptor antagonist, IL-6, granulocyte-colony-stimulating factor [G-CSF], all p < or = 0.002, but no change in IL-10) and chemokines (IL-8, epithelial neutrophil activating protein-78, monocyte chemotactic protein-1, macrophage inflammatory protein [MIP]-lalpha, MIP-lbeta, all p < or = 0.001, but no change in growth-regulated peptide-alpha). A later phase (24 h to 48 h) showed increased neutrophils, macrophages, monocytes, and lymphocytes (all p < or = 0.02), and a return to basal levels of most mediators. Elevated levels of inflammatory markers (TNFR(1), TNFR(2), L-selectin, lactoferrin, and myeloperoxidase) persisted in the BAL at 48 h (p < or = 0.001). Increased permeability to albumin occurred throughout both phases (p = 0.001). Blood C-reactive protein, serum amyloid A, IL-6, IL-1ra, G-CSF, but not TNF-alpha increased by 8 h (all p < or = 0.008). The local pulmonary inflammatory

response to endotoxin has a unique qualitative and temporal profile of inflammation compared with previous reports of intravenous endotoxin challenges. This model provides a means to investigate factors that

initiate, amplify, and resolve local lung inflammation.

ACCESSION NUMBER: 2001333979 MEDLINE DOCUMENT NUMBER: PubMed ID: 11401879

TITLE: Local inflammatory responses following bronchial endotoxin

instillation in humans.

COMMENT: Comment in: Am J Respir Crit Care Med. 2001

Jun; 163(7):1516-7. PubMed ID: 11401864

AUTHOR: O'Grady N P; Preas H L; Pugin J; Fiuza C; Tropea M; Reda D;

Banks S M; Suffredini A F

CORPORATE SOURCE: Critical Care Medicine Department, Warren G. Magnuson

Clinical Center, National Institutes of Health, Bethesda,

Maryland, USA.

SOURCE: American journal of respiratory and critical care medicine,

(2001 Jun) 163 (7) 1591-8.

Journal code: 9421642. ISSN: 1073-449X.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200108

ENTRY DATE: Entered STN: 20010806

Last Updated on STN: 20010806 Entered Medline: 20010802

L20 ANSWER 10 OF 210 MEDLINE on STN

TI Alpha-1-antichymotrypsin and oxidative stress in the peripheral blood from patients with probable Alzheimer disease: a short-term longitudinal study.

AB To evaluate the stability and reproducibility of selected peripheral oxidative stress markers and their possible relation to cognitive performance, three different blood samples were taken at 7- to 10-day intervals from 11 patients with probable Alzheimer disease (AD) and 11 nondemented controls. Blood samples were also collected once from 6 patients with vascular dementia (VD). Alpha-1-antichymotrypsin (ACT),

C-reactive protein (CRP), glutathione peroxidase (GSH-Px), superoxide dismutase (SOD), lactoferrin (LTF), and total lipid peroxidation (LPO) were then measured. Blood levels of ACT and GSH-Px were increased in AD patients but not in patients with VD. Levels of LTF, CRP, and LPO were comparable between AD patients and controls. Erythrocyte SOD activity was increased in AD patients. Blood levels of ACT negatively correlated with LPO levels and positively correlated with scores of the Global Deterioration Scale of AD patients. ACT might be implicated in controlling oxidative damage of blood lipids and their turnover during the progression of AD.

ACCESSION NUMBER: 2001245993 MEDLINE DOCUMENT NUMBER: PubMed ID: 11236825

TITLE: Alpha-1-antichymotrypsin and oxidative stress in the

peripheral blood from patients with probable Alzheimer

disease: a short-term longitudinal study.

AUTHOR: Licastro F; Pedrini S; Davis L J; Caputo L; Tagliabue J;

Savorani G; Cucinotta D; Annoni G

CORPORATE SOURCE: Dipartimento di Patologia Sperimentale, University of

Bologna, Italy.

SOURCE: Alzheimer disease and associated disorders, (2001 Jan-Mar)

15 (1) 51-5.

Journal code: 8704771. ISSN: 0893-0341.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200105

ENTRY DATE: Entered STN: 20010517

Last Updated on STN: 20010517 Entered Medline: 20010510

Immunoglobulin isotypes of anti-myeloperoxidase and anti-ΤI lactoferrin antibodies in patients with collagen diseases.

AB To investigate the prevalence and clinical relevance of immunoglobulin (Ig) isotypes of antimyeloperoxidase (MPO) and antilactoferrin (LF) antibodies in collagen diseases, enzyme-linked immunosorbent assay was employed to detect the Iq isotypes of both antibodies. The purified proteins of MPO and LF were used as two major representative antigens for anti-neutrophil cytoplasmic antibodies (ANCA) with a perinuclear staining pattern by an indirect immunofluorescent technique. We examined 131 serum samples from 79 patients with rheumatoid arthritis (RA), 32 with systemic lupus erythematosus (SLE), 14 with progressive systemic sclerosis (PSS), 6 with polymyositis/dermatomyositis (PM/DM), and 5 with idiopathic crescentic glomerulonephritis who served as positive controls and 36 healthy subjects who served as controls. A limited number of patients with RA (4-10%), SLE (6-9%), and PSS (7-14%) but not PM/DM showed positive IgG or IgA anti-MPO antibody (MPO-ANCA) but not IgM MPO-ANCA. However, 10-20% of RA, 40-60% of SLE, 20-36% of PSS but none of the PM/DM patients showed positive IgG, IgA, or IgM anti-LF antibody (LF-ANCA). MPO- and LF-ANCA positivity in RA patients was correlated with markers of disease activity such as the erythrocyte sedimentation rate, Creactive protein, and serum Ig levels. IgG LF-ANCA but not MPO-ANCA positivity in SLE patients also was correlated with the disease activity index but not with clinical features. Neither MPO- nor LF-ANCA positivity in PSS patients was correlated with any clinical features. Overall, both MPO- and LF-ANCA were found mainly in RA, SLE, and PSS patients but not in PM/DM patients. The Ig isotypes of MPO- and LF-ANCA frequently belonged to both IgG and IgA and rarely to the IgM class. Both MPO- and LF-ANCA positivity reflected disease activity in RA and SLE rather than specific organ involvement.

ACCESSION NUMBER: 2001095335 MEDLINE DOCUMENT NUMBER: PubMed ID: 10939715

TITLE: Immunoglobulin isotypes of anti-myeloperoxidase and anti-

lactoferrin antibodies in patients with collagen

diseases.

Chikazawa H; Nishiya K; Matsumori A; Hashimoto K AUTHOR: CORPORATE SOURCE:

Second Department of Internal Medicine, Kochi Medical

School, Nankoku City, Japan.

SOURCE: Journal of clinical immunology, (2000 Jul) 20 (4) 279-86.

Journal code: 8102137. ISSN: 0271-9142.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200102

ENTRY DATE: Entered STN: 20010322

Last Updated on STN: 20010322 Entered Medline: 20010201

L20 ANSWER 12 OF 210 MEDLINE on STN

Prospective evaluation of the frequency and clinical significance of antineutrophil cytoplasmic and anticardiolipin antibodies in community cases of patients with rheumatoid arthritis.

AB OBJECTIVES: To evaluate the frequencies of antineutrophil cytoplasmic (ANCA), anticardiolipin (aCLA) and anti-beta(2)-glycoprotein 1 antibodies (abeta(2)-GP1A) in rheumatoid arthritis (RA) of limited duration in patients recruited primarily from private practitioners (80%), and to attempt to correlate the presence of these antibodies with certain clinical and/or biological criteria. Patients and methods. Patients (n = 102) with RA evolving for <5 yr (mean 2.2 yr) were recruited. A home evaluation collected clinical data [Ritchie articular index, Health Assessment Questionnaire (HAQ) index, extra-articular manifestations] and blood for biological analyses [C-reactive

protein (CRP), rheumatoid factor, ANCA, aCLA, abeta(2)-GP1A]. ANCA were detected by indirect immunofluorescence on neutrophils and their specificity was determined by enzyme-linked immunosorbent assay (ELISA) and confirmed by immunoblotting; aCLA and abeta(2)-GP1A were detected by ELISA. RESULTS: Patients had mild RA (Ritchie = 11/78 +/- 9.6; HAQ = 0.79/3 +/- 0.7), probably due to the recruitment procedure. ANCA, aCLA

and abeta(2)-GP1A frequencies were 18.5, 7 and 0%, respectively. Titres of ANCA and aCLA were low. A perinuclear ANCA staining pattern was exclusively observed and lactoferrin was shown to be the major antigen recognized. No relationship was found between ANCA and aCLA and/or rheumatoid factor, or any clinical manifestations. ANCA were more common in RA of longer duration (cut-off: 4 yr; P = 0.05) and aCLA were correlated with the CRP level (P = 0.05). CONCLUSIONS: In RA of recent onset, ANCA and aCLA were detected at low titres and frequencies, and were not associated with any clinical manifestations. A longitudinal study is needed to determine whether their early appearance is predictive of subsequent disease severity.

ACCESSION NUMBER: 2000386026 MEDLINE DOCUMENT NUMBER: PubMed ID: 10852977

TITLE: Prospective evaluation of the frequency and clinical

significance of antineutrophil cytoplasmic and

anticardiolipin antibodies in community cases of patients

with rheumatoid arthritis.

AUTHOR: Vittecoq O; Jouen-Beades F; Krzanowska K; Bichon-Tauvel I;

Menard J F; Daragon A; Gilbert D; Tron F; Le Loet X

CORPORATE SOURCE: Service de Rhumatologie, INSERM U 519 et Institut Federatif

s. Service de kidilacorogie, insekti o sia et institut rederatii

de Recherche Multidisciplinaire sur les Peptides, Centre

Hospitalier Universitaire de Rouen, France.

SOURCE: Rheumatology (Oxford, England), (2000 May) 39 (5) 481-9.

Journal code: 100883501. ISSN: 1462-0324.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200008

ENTRY DATE: Entered STN: 20000818

Last Updated on STN: 20030304 Entered Medline: 20000808

L20 ANSWER 13 OF 210 MEDLINE on STN

TI The inflammatory response following treatment of abdominal aortic aneurysms: a comparison between open surgery and endovascular repair.

AB OBJECTIVES: to compare the inflammatory response following endovascular and conventional AAA repair. Design: prospective study. PATIENTS AND METHODS: ten patients were selected for open surgery (OPEN) and ten for endovascular (ENDO) AAA repair. Leukocytes, platelets, myeloperoxidase, lactoferrin, beta-thromboglobulin, C-reactive

protein (CRP), interleukin 6 (IL-6), tumour necrosis factor alpha (TNF-alpha) and complement activation products were measured before, during and after surgery. RESULTS: in the OPEN group the median hospital stay was longer (6 vs. 12 days, p=0.001) and more patients required transfusion (p=0.02). IL-6 and CRP increased postoperatively, most in OPEN (p<0.01). Platelet counts decreased after the first angiography in ENDO (p<0.01) and before a ortic cross-clamping in OPEN (p<0.05). The decrease was larger in OPEN (p=0.02). Leukocyte counts decreased after the first angiography in ENDO, and thereafter increased (p=0.001). An equivalent increase was observed in OPEN after declamping (p=0.001). Leukocyte and platelet degranulation products increased after the first angiography in ENDO and after declamping in OPEN. Changes in complement activation products were small. TNF-alpha did not change significantly. CONCLUSION: endovascular AAA repair caused significant leukocyte and platelet activation. Based on the timing of activation this could be caused by radiographic contrast media.

Copyright 2000 Harcourt Publishers Ltd. ACCESSION NUMBER: 2000295332 MEDLINE

DOCUMENT NUMBER: PubMed ID: 10828237

TITLE: The inflammatory response following treatment of abdominal

aortic aneurysms: a comparison between open surgery and

endovascular repair.

AUTHOR: Odegard A; Lundbom J; Myhre H O; Hatlinghus S; Bergh K;

Waage A; Bjerve K S; Mollnes T E; Aadahl P; Lie T A; Videm

V

CORPORATE SOURCE: Department of Radiology, Regional Hospital of Trondheim,

Norway.

SOURCE: European journal of vascular and endovascular surgery :

official journal of the European Society for Vascular

Surgery, (2000 May) 19 (5) 536-44.

Journal code: 9512728. ISSN: 1078-5884.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200007

ENTRY DATE: Entered STN: 20000720

Last Updated on STN: 20000720 Entered Medline: 20000710

L20 ANSWER 14 OF 210 MEDLINE on STN

Heparin-coated cardiopulmonary bypass circuits reduce circulating complement factors and interleukin-6 in paediatric heart surgery.

AB Children are sensitive to the inflammatory side effects of cardiopulmonary bypass (CPB). Our intention was to investigate if the biocompatibility benefits of heparin-coated CPB circuits apply to children. In 20 operations, 19 children were randomized to heparin-coated (group HC, n = 10) or standard (group C, n = 10) bypass circuits. Plasma levels of acute phase reactants, interleukins, granulocytic proteins and complement factors were measured. All were significantly elevated after CPB. Levels of complement factor C3a (851 (791-959)ng/ml [median with quartiles] in group C, 497 (476-573)ng/ml in group HC, p < 0.001), Terminal Complement Complex (114 (71-130) AU/ml in group C, 35.5 (28.9-51.4) AU/ml in group HC, p < 0.001), and interleukin-6 (570 (203-743) pg/ml in group C, 168 (111-206)pg/ml in group HC, p = 0.005), were significantly reduced in group HC. Heparin-coated CPB circuits improve the biocompatibility of CPB during heart surgery in the paediatric patient population, as reflected by significantly reduced levels of circulating complement factors and interleukin-6.

ACCESSION NUMBER: 2000273542 MEDLINE DOCUMENT NUMBER: PubMed ID: 10816058

TITLE: Heparin-coated cardiopulmonary bypass circuits reduce

circulating complement factors and interleukin-6 in

paediatric heart surgery.

AUTHOR: Olsson C; Siegbahn A; Henze A; Nilsson B; Venge P;

Joachimsson P O; Thelin S

CORPORATE SOURCE: Department of Cardiothoracic Surgery, Uppsala University

Hospital, Sweden.

SOURCE: Scandinavian cardiovascular journal : SCJ, (2000) 34 (1)

33-40.

Journal code: 9708377. ISSN: 1401-7431.

PUB. COUNTRY: Norway

DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200007

ENTRY DATE: Entered STN: 20000728

Last Updated on STN: 20000728 Entered Medline: 20000714

L20 ANSWER 15 OF 210 MEDLINE on STN

TI Impaired neutrophil exocytosis in patients with severe pneumonia.

AB OBJECTIVE: Polymorphonuclear neutrophils (PMN) are one of the major offector colla of pulmonary defence against bacterial infection. To

effector cells of pulmonary defence against bacterial infection. To determine whether neutrophil function is impaired in patients with severe pneumonia, we assessed the two main partial functions exocytosis and oxidative response (ROS production) in isolated neutrophils from the peripheral venous blood of pneumonia patients and healthy volunteers. In addition, pulmonary neutrophils and peripheral neutrophils were compared in pneumonia patients. PATIENTS AND METHODS: Twenty-one patients with severe pneumonia were enrolled in the study. Eleven patients were mechanically ventilated, ten patients breathed spontaneously. For comparison, ten healthy adults were studied. The release of two markers

of neutrophil exocytosis, lactoferrin and myeloperoxidase (MPO), with and without stimulation by phorbol-myristate-acetate (PMA), was determined using immunoluminometric assays. ROS production was quantified using luminol-enhanced chemiluminescence. In addition, the clinical severity of pneumonia was correlated to neutrophil exocytosis. RESULTS: With regard to blood neutrophils, both basal and PMA-stimulated exocytosis were significantly impaired in pneumonia patients compared to healthy volunteers (basal lactoferrin secretion in pneumonia patients: 0.25+/-0.36 pg/PMN versus controls: 1.17+/-0.78 pg/PMN, p<0.01). contrast, both basal and PMA-stimulated ROS production were increased in patients compared to controls (spontaneous chemiluminescence in pneumonia patients: 13.6x10(5) cpm versus controls: 5.5x10(5) cpm). In pneumonia patients, the pulmonary neutrophils released significantly more lactoferrin, MPO and ROS compared to blood neutrophils (basal lactoferrin secretion of pulmonary neutrophils: 1.19+/-1.55 pg/PMN; p<0,01). However, after stimulation with PMA the exocytosis of pulmonary and blood neutrophils was similar. The severity of pneumonia and prognostic indices like albumin were inversely correlated to the release of lactoferrin in blood neutrophils (p<0,05). CONCLUSION: In patients with severe pneumonia, the exocytosis of blood neutrophils was significantly impaired. In contrast to this, the oxidative response was increased. Impaired bone marrow maturation of neutrophils during severe infection, perhaps due to shortened maturation time, could explain these findings.

MEDLINE ACCESSION NUMBER: 1999158364 PubMed ID: 10051077 DOCUMENT NUMBER:

TITLE: Impaired neutrophil exocytosis in patients with severe

pneumonia.

AUTHOR: Zimmermann B; Dalhoff K; Braun J

CORPORATE SOURCE: Department of Medicine II, Medical University of Lubeck,

Germany.

Intensive care medicine, (1999 Jan) 25 (1) 44-51. SOURCE:

Journal code: 7704851. ISSN: 0342-4642.

United States PUB. COUNTRY:

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199905

Entered STN: 19990601 ENTRY DATE:

> Last Updated on STN: 19990601 Entered Medline: 19990520

=> d his

L3

L4

L5

L6

L7 L8

L9 L10

L11

L15

(FILE 'HOME' ENTERED AT 15:53:22 ON 16 MAR 2005)

FILE 'MEDLINE, JAPIO, BIOSIS, WPIDS, JICST-EPLUS, BIOTECHDS, HCAPLUS, SCISEARCH, CEN, CEABA-VTB, BIOBUSINESS, EMBASE, DGENE' ENTERED AT 15:54:03 ON 16 MAR 2005

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L1
              1 S LACTOFERRIN AND (REDUCE CIRCULATING LEVELS OF CHOLESTEROL?)
L2
              0 S LACTOFERRIN COMPOSITION ADJ2 ADMINISTRATION
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18 S LACTOFERRIN COMPOSITION

26082 S LACTOFERRIN

0 S L4 AND (REDUCE VASCULAR INFLAMMATION?)

25 S HEART DISEASE AND L4

205 S L4 AND DIABETES

51 S L4 AND HYPERTENSION

38 S L7 AND TREATMENT

16 S L8 AND TREATMENT

0 S LACTOFERRIN ADJ2 CHOLESTEROL

L121555 S L4 AND THERAPY

3013 S L4 AND TREATMENT

L13 L14

267 S L4 AND HEART

33 S L14 AND L13

8 S L15 AND L12 L16 E VARADHACHARY, A/AU

E ENGELMAYER, J/AU

E GLYNN, P/AU E WANG, Y/AU

L17 0 S LDL DECREASE AND L4

L18 0 S DECREASE TRIGLYCERIDE AND L4

L19 0 S DECREASE VLDL AND L4

L20 210 S (C-REACTIVE PROTEIN) AND L4

=> s 14 and (treatment or theraphy or medicament or injection)

L21 3581 L4 AND (TREATMENT OR THERAPHY OR MEDICAMENT OR INJECTION)

=> s 121 and heart

L22 51 L21 AND HEART

=> s 12 and atherosclerosis

L23 0 L2 AND ATHEROSCLEROSIS

=> d 122 ti abs ibib 1-10

L22 ANSWER 1 OF 51 MEDLINE on STN

TI Bovine **lactoferrin** has a nitric oxide-dependent hypotensive effect in rats.

Lactoferrin (LF) is a multifunctional protein that is found in AB milk, neutrophils, and other biological fluids. Under inflammatory conditions, LF production is increased in the periphery by neutrophils. However, the cardiovascular function of LF is still unknown. In the present study, we investigated the effect of bovine LF (BLF) on the mean blood pressure (MBP) and heart rate (HR) in urethaneanesthetized rats and the vascular function of BLF in the rat thoracic aorta. Intravenous injection of BLF produced dose-dependent decreases in MBP but did not affect HR, while the opioid agonist morphine decreased both MBP and HR. The hypotensive effect of BLF was not altered by naloxone methiodide, which cannot pass through the blood-brain barrier, but was significantly reduced by naloxone hydrochloride, which does pass through the blood-brain barrier. BLF-induced hypotension was completely blocked by the NO synthase inhibitor NG-nitro-l-arginine methyl ester (1-NAME) but not by the inactive enantiomer of 1-NAME, NG-nitro-d-arginine methyl ester (d-NAME). BLF-induced hypotension was not altered by the muscarinic ACh receptor antagonist atropine or the cyclooxygenase inhibitor diclofenac. BLF produced relaxation in endothelium-intact but not endothelium-denuded aortic rings precontracted with phenylephrine. The relaxation evoked by BLF was completely blocked by 1-NAME but not by d-NAME or the ATP-sensitive potassium channel blocker glibenclamide. These results suggest that BLF causes hypotension via an endothelium-dependent vasodilation that is strongly mediated by NO production and that BLF-induced hypotension also may be mediated by the central opioidergic system.

ACCESSION NUMBER: 2004009027 MEDLINE DOCUMENT NUMBER: PubMed ID: 14563657

TITLE: Bovine lactoferrin has a nitric oxide-dependent

hypotensive effect in rats.

AUTHOR: Hayashida Ken-Ichiro; Takeuchi Takashi; Ozaki Takeshi;

Shimizu Hirohiko; Ando Kunio; Miyamoto Atsushi; Harada

Etsumori

CORPORATE SOURCE: Dept. of Veterinary Physiology, Faculty of Agriculture,

Tottori Univ., Tottori 680-0945, Japan.

SOURCE: American journal of physiology. Regulatory, integrative and

comparative physiology, (2004 Feb) 286 (2) R359-65.

Electronic Publication: 2003-10-16.

Journal code: 100901230. ISSN: 0363-6119.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200402

ENTRY DATE: Entered STN: 20040107

Last Updated on STN: 20040302 Entered Medline: 20040227 L22 ANSWER 2 OF 51 MEDLINE on STN

AB

AUTHOR:

TI Molecular cloning and functional expression of a human intestinal lactoferrin receptor.

Lactoferrin (Lf), a major iron-binding protein in human milk, has been suggested to have multiple biological roles such as facilitating iron absorption, modulating the immune system, embryonic development, and cell proliferation. Our previous binding studies suggested the presence of a specific receptor for Lf (LfR) in the small intestine of newborn infants, which may facilitate iron absorption. We here report the cloning and the functional expression of the human intestinal LfR and the evidence of its involvement in iron metabolism. The entire coding region of the LfR cDNA was cloned by PCR based on amino acid sequences of the purified native LfR (nLfR). The recombinant LfR (rLfR) was then expressed in a baculovirus-insect cell system and purified by immobilized human Lf (hLf) affinity chromatography where binding of hLf to the rLfR was partially Ca(2+) dependent. The apparent molecular mass was 136 kDa under nonreducing conditions and 34 kDa under reducing conditions. 125I-hLf bound to the rLfR with an apparent K(d) of approximately 360 nM. These biochemical properties of the rLfR are similar to those of the nLfR. RT-PCR revealed that the gene was expressed at high levels in fetal small intestine and in adult heart and at lower levels in Caco-2 cells. PI-PLC treatment of Caco-2 cells indicated that the LfR is GPI anchored. In Caco-2 cells transfected with the LfR gene, 125I-hLf binding and 59Fe-hLf uptake were increased by 1.7 and 3.4 times, respectively, compared to those in mock-transfected cells. Our findings demonstrate the presence of a unique receptor-mediated mechanism for nutrient uptake by the newborn.

ACCESSION NUMBER: 2001699646 MEDLINE DOCUMENT NUMBER: PubMed ID: 11747454

TITLE: Molecular cloning and functional expression of a human

intestinal lactoferrin receptor. Suzuki Y A; Shin K; Lonnerdal B

CORPORATE SOURCE: Department of Nutrition, University of California, Davis,

One Shields Avenue, Davis, California 95616, USA.

SOURCE: Biochemistry, (2001 Dec 25) 40 (51) 15771-9.

Journal code: 0370623. ISSN: 0006-2960.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals OTHER SOURCE: GENBANK-AF271386

ENTRY MONTH: 200201

ENTRY DATE: Entered STN: 20011219

Last Updated on STN: 20020128 Entered Medline: 20020123

L22 ANSWER 3 OF 51 MEDLINE on STN

- TI Lactoferrin and anti-lactoferrin antibodies: effects of ironloading of lactoferrin on albumin extravasation in different tissues in rats.
- AΒ Lactoferrin is a cationic iron-binding protein, which is released from activated neutrophils in concert with reactive oxygen species. In vitro, lactoferrin has both anti- and proinflammatory effects; many of them dependent on iron-binding. In vivo, only iron-free lactoferrin reduced inflammatory hyperpermeability in the lung. We therefore examined whether 1 mg iron-free (Apo-Lf) or iron-saturated lactoferrin (Holo-Lf) alone or followed by anti-lactoferrin antibodies (aLf) affected permeability evaluated by extravasation of radiolabelled bovine serum albumin (CBSA) in different tissues of anaesthetized rats. Fifteen minutes after i.v. injection of Lf, aLf or saline was given and circulatory arrest was induced 20 min thereafter. Measurements were performed in control, after Apo-Lf, Holo-Lf, Apo-Lf + aLf, Holo-Lf + aLf and aLf alone (n=6-8 in each group). No intergroup differences were found for plasma volume and haematocrit at the start and end of the 37 min extravasation period or for total tissue water in any of the six different tissues studied, excluding larger transcapillary fluid shifts. However, increases in CBSA were seen without differences in tissue intravascular

volume. Iron-free lactoferrin and aLf alone did not change CBSA significantly. Iron-saturated lactoferrin significantly increased CBSA in skin (neck), trachea and left ventricle of the heart to 249 +/- 9, 284 +/- 16 and 160 +/- 7% of control, respectively. When followed by aLf, both Apo- and Holo-Lf increased CBSA significantly in four and five of the tissues studied, respectively. However, no significant effect was seen for Holo-Lf + aLf compared with Holo-Lf alone. In conclusion, iron-saturated, but not iron-free lactoferrin increased CBSA, whereas antilactoferrin increased CBSA compared with lactoferrin alone only when following iron-free

lactoferrin.
ACCESSION NUMBER: 2001031974 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10971218

TITLE: Lactoferrin and anti-lactoferrin

antibodies: effects of ironloading of **lactoferrin** on albumin extravasation in different tissues in rats.

AUTHOR: Erga K S; Peen E; Tenstad O; Reed R K

CORPORATE SOURCE: Department of Physiology, University of Bergen, Norway.

SOURCE: Acta physiologica Scandinavica, (2000 Sep) 170 (1) 11-9.

Journal code: 0370362. ISSN: 0001-6772.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200011

ENTRY DATE: Entered STN: 20010322

Last Updated on STN: 20010322 Entered Medline: 20001120

L22 ANSWER 4 OF 51 MEDLINE on STN

TI Heparin-coated cardiopulmonary bypass circuits reduce circulating complement factors and interleukin-6 in paediatric heart

AB Children are sensitive to the inflammatory side effects of cardiopulmonary bypass (CPB). Our intention was to investigate if the biocompatibility benefits of heparin-coated CPB circuits apply to children. In 20 operations, 19 children were randomized to heparin-coated (group HC, n = 10) or standard (group C, n = 10) bypass circuits. Plasma levels of acute phase reactants, interleukins, granulocytic proteins and complement factors were measured. All were significantly elevated after CPB. Levels of complement factor C3a (851 (791-959)ng/ml [median with quartiles] in group C, 497 (476-573)ng/ml in group HC, p < 0.001), Terminal Complement Complex (114 (71-130) AU/ml in group C, 35.5 (28.9-51.4) AU/ml in group HC, p < 0.001), and interleukin-6 (570 (203-743) pg/ml in group C, 168 (111-206)pg/ml in group HC, p = 0.005), were significantly reduced in group HC. Heparin-coated CPB circuits improve the biocompatibility of CPB during heart surgery in the paediatric patient population, as reflected by significantly reduced levels of circulating complement factors and interleukin-6.

ACCESSION NUMBER: 2000273542 MEDLINE DOCUMENT NUMBER: PubMed ID: 10816058

TITLE: Heparin-coated cardiopulmonary bypass circuits reduce

circulating complement factors and interleukin-6 in

paediatric heart surgery.

AUTHOR: Olsson C; Siegbahn A; Henze A; Nilsson B; Venge P;

Joachimsson P O; Thelin S

CORPORATE SOURCE: Department of Cardiothoracic Surgery, Uppsala University

Hospital, Sweden.

SOURCE: Scandinavian cardiovascular journal : SCJ, (2000) 34 (1)

33-40.

Journal code: 9708377. ISSN: 1401-7431.

PUB. COUNTRY: Norway

DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200007

ENTRY DATE:

Entered STN: 20000728

Last Updated on STN: 20000728 Entered Medline: 20000714

L22 ANSWER 5 OF 51 MEDLINE on STN

TI Characterization of the binding of ferritin to the rat liver ferritin

receptor.

The binding characteristics and specificity of the rat hepatic ferritin AB receptor were investigated using ferritins prepared from rat liver, heart, spleen, kidney and serum, human liver and serum, guinea pig liver and horse spleen as well as ferritins enriched with respect to either H- or L-type subunit composition, prepared by chromatofocusing of rat liver ferritin on Mono-P or by reverse-phase chromatography of ferritin subunits on ProRPC 5/10. No significant difference was apparent in the binding of any of the tissue ferritins, or of ferritins of predominantly acidic or basic subunit composition. However, serum ferritin bound with a lower affinity. The effect of carbohydrate on the ferritin-receptor binding was examined by glycosidase treatment of tissue and serum ferritins. Tissue ferritin binding was unaffected, while serum ferritin binding affinity was increased to that of the tissue ferritins. Inhibition of ferritin binding by lactoferrin was not due to common carbohydrate moieties as previously suggested but was due to direct binding of lactoferrin to ferritin. Therefore, carbohydrate residues do not appear to facilitate receptor-ferritin binding, and sialic acid residues present on serum ferritin may in fact interfere with binding. The results indicate that the hepatic ferritin receptor acts preferentially to remove tissue ferritins from the circulation. The lower binding affinity of serum ferritin for the ferritin receptor explains its slower in vivo clearance relative to tissue ferritins.

ACCESSION NUMBER:

86051611 MEDLINE

DOCUMENT NUMBER:

PubMed ID: 2998476

TITLE:

Characterization of the binding of ferritin to the rat

liver ferritin receptor.

AUTHOR:

Mack U; Storey E L; Powell L W; Halliday J W

SOURCE:

Biochimica et biophysica acta, (1985 Dec 13) 843 (3)

164-70.

Journal code: 0217513. ISSN: 0006-3002.

PUB. COUNTRY:

Netherlands

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

198601

ENTRY DATE:

Entered STN: 19900321

Last Updated on STN: 19900321 Entered Medline: 19860121

L22 ANSWER 6 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN Bovine lactoferrin has a nitric oxide-dependent hypotensive effect in rats.

Lactoferrin (LF) is a multifunctional protein that is found in ΑB milk, neutrophils, and other biological fluids. Under inflammatory conditions, LF production is increased in the periphery by neutrophils. However, the cardiovascular function of LF is still unknown. In the present study, we investigated the effect of bovine LF (BLF) on the mean blood pressure (MBP) and heart rate (HR) in urethaneanesthetized rats and the vascular function of BLF in the rat thoracic aorta. Intravenous injection of BLF produced dose-dependent decreases in MBP but did not affect HR, while the opioid agonist morphine decreased both MBP and HR. The hypotensive effect of BLF was not altered by naloxone methiodide, which cannot pass through the blood-brain barrier, but was significantly reduced by naloxone hydrochloride, which does pass through the blood-brain barrier. BLF-induced hypotension was completely blocked by the NO synthase inhibitor NG-nitro-L-arginine methyl ester (L-NAME) but not by the inactive enantiomer of L-NAME, NG-nitro-D-arginine methyl ester (D-NAME). BLF-induced hypotension was not altered by the muscarinic ACh receptor antagonist atropine or the cyclooxygenase inhibitor diclofenac. BLF produced relaxation in endothelium-intact but

not endothelium-denuded aortic rings precontracted with phenylephrine. The relaxation evoked by BLF was completely blocked by L-NAME but not by D-NAME or the ATP-sensitive potassium channel blocker glibenclamide.

These results suggest that BLF causes hypotension via an

endothelium-dependent vasodilation that is strongly mediated by NO production and that BLF-induced hypotension also may be mediated by the

central opioidergic system.

2004:143975 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV200400144150

Bovine lactoferrin has a nitric oxide-dependent TITLE:

hypotensive effect in rats.

Hayashida, Ken-ichiro; Takeuchi, Takashi; Ozaki, Takeshi; AUTHOR (S):

Shimizu, Hirohiko; Ando, Kunio; Miyamoto, Atsushi; Harada,

Etsumori [Reprint Author]

Dept. of Veterinary Physiology, Faculty of Agriculture, CORPORATE SOURCE:

Tottori Univ., Tottori, 680-0945, Japan

harada@muses.tottori-u.ac.jp

American Journal of Physiology, (February 2004) Vol. 286, SOURCE:

No. 2 Part 2, pp. R359-R365. print.

ISSN: 0002-9513 (ISSN print).

DOCUMENT TYPE: Article LANGUAGE: English

ENTRY DATE: Entered STN: 10 Mar 2004

Last Updated on STN: 10 Mar 2004

L22 ANSWER 7 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

Molecular cloning and functional expression of a human intestinal TI

lactoferrin receptor.

Lactoferrin (Lf), a major iron-binding protein in human milk, AΒ has been suggested to have multiple biological roles such as facilitating iron absorption, modulating the immune system, embryonic development, and cell proliferation. Our previous binding studies suggested the presence of a specific receptor for Lf (LfR) in the small intestine of newborn infants, which may facilitate iron absorption. We here report the cloning and the functional expression of the human intestinal LfR and the evidence of its involvement in iron metabolism. The entire coding region of the UR cDNA was cloned by PCR based on amino acid sequences of the purified native UR (nLfR). The recombinant UR (rLfR) was then expressed in a baculovirus-insect cell system and purified by immobilized human Lf (hLf) affinity chromatography where binding of hLf to the rLfR was partially Ca2+ dependent. The apparent molecular mass was 136 kDa under nonreducing conditions and 34 kDa under reducing conditions. 125I-hLf bound to the rLfR with an apparent Kd of apprx360 nM. These biochemical properties of the rLfR are similar to those of the nLfR. RT-PCR revealed that the gene was expressed at high levels in fetal small intestine and in adult heart and at lower levels in Caco-2 cells. PI-PLC

treatment of Caco-2 cells indicated that the UR is GPI anchored. In Caco-2 cells transfected with the LfR gene, 125I-hLf binding and 59Fe-hLf uptake were increased by 1.7 and 3.4 times, respectively, compared to those in mock-transfected cells. Our findings demonstrate the presence of a unique receptor-mediated mechanism for nutrient uptake by the newborn.

2002:100410 BIOSIS ACCESSION NUMBER: DOCUMENT NUMBER: PREV200200100410

TITLE: Molecular cloning and functional expression of a human

intestinal lactoferrin receptor.

Suzuki, Yasushi A.; Shin, Kouichirou; Lonnerdal, Bo AUTHOR(S):

[Reprint author]

Department of Nutrition, University of California, Davis, CORPORATE SOURCE:

One Shields Avenue, Davis, CA, 95616, USA

bllonnerdal@ucdavis.edu

SOURCE: Biochemistry, (December 25, 2001) Vol. 40, No. .51, pp.

15771-15779. print.

CODEN: BICHAW. ISSN: 0006-2960.

DOCUMENT TYPE: Article LANGUAGE: English

OTHER SOURCE: Genbank-AW029086; Genbank-NM010584; Genbank-R06009

Entered STN: 24 Jan 2002 ENTRY DATE:

L22 ANSWER 8 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN Lactoferrin and anti-lactoferrin antibodies: Effects of ironloading of lactoferrin on albumin extravasation in different tissues in rats. Lactoferrin is a cationic iron-binding protein, which is AB released from activated neutrophils in concert with reactive oxygen species. In vitro, lactoferrin has both anti- and proinflammatory effects; many of them dependent on iron-binding. In vivo, only iron-free lactoferrin reduced inflammatory hyperpermeability in the lung. We therefore examined whether 1 mg iron-free (Apo-Lf) or iron-saturated lactoferrin (Holo-Lf) alone or followed by anti-lactoferrin antibodies (aLf) affected permeability evaluated by extravasation of radiolabelled bovine serum albumin (CBSA) in different tissues of anaesthetized rats. Fifteen minutes after i.v. injection of Lf, aLf or saline was given and circulatory arrest was induced 20 min thereafter. Measurements were performed in control, after Apo-Lf, Holo-Lf, Apo-Lf + aLf, Holo-Lf + aLf and alf alone (n = 6-8 in each group). No intergroup differences were found for plasma volume and haematocrit at the start and end of the 37 min extravasation period or for total tissue water in any of the six different tissues studied, excluding larger transcapillary fluid shifts. However, increases in CBSA were seen without differences in tissue intravascular volume. Iron-free lactoferrin and aLf alone did not change CBSA significantly. Iron-saturated lactoferrin significantly increased CBSA in skin (neck), trachea and left ventricle of the heart to 249 +- 9, 284 +- 16 and 160 +- 7% of control, respectively. When followed by aLf, both Apo- and Holo-Lf increased CBSA significantly in four and five of the tissues studied, respectively. However, no significant effect was seen for Holo-Lf + aLf compared with Holo-Lf alone. In conclusion, iron-saturated, but not iron-free lactoferrin increased CBSA, whereas antilactoferrin increased CBSA compared with lactoferrin alone only when following iron-free lactoferrin. ACCESSION NUMBER: 2000:521892 BIOSIS PREV200000521892 DOCUMENT NUMBER: Lactoferrin and anti-lactoferrin TITLE: antibodies: Effects of ironloading of lactoferrin on albumin extravasation in different tissues in rats. Erga, K. S. [Reprint author]; Peen, E.; Tenstad, O.; Reed, AUTHOR(S): R. K. Department of Physiology, University of Bergen, Arstadveien CORPORATE SOURCE: 19, N-5009, Bergen, Norway Acta Physiologica Scandinavica, (September, 2000) Vol. 170, SOURCE: No. 1, pp. 11-19. print. CODEN: APSCAX. ISSN: 0001-6772. DOCUMENT TYPE: Article English LANGUAGE: Entered STN: 29 Nov 2000 ENTRY DATE: Last Updated on STN: 11 Jan 2002 L22 ANSWER 9 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN General pharmacological properties of partially degraded ТT lactoferrin-derived peptide (MONL-03). The general pharmacological properties of MONL-03, a fragment of AB lactoferrin which is a whey protein in milk, were studied in mice and rats. In mice, intracerebroventricular injection of MONL-03 (0.5-20 mu-g/mouse) increased ambulation and the electrical conductance of the paw pads, but it did not alter sleeping time after pentobarbital. Single i.p. injection of MONL-03 (10-50 mg/kg) decreased ambulation and the electrical conductance, and it prolonged sleeping time after pentobarbital. Oral administration of MONL-03 (100, 200 mg/kg), however, did not markedly affect ambulation. Single i.p. injection of MONL-03 (10-50 mg/kg) prolonged the duration of gasping response and decreased the mortality caused by coadministration of

adrenaline and collagen. Intradermal injection of MONL-03 (1 mg/mouse) induced edema. In anesthetized mice, heart rate

decreased after i.p. injection of MONL-03 (10-50 mg/kg). In anesthetized rats, i.v. injection of MONL-03 (0.5, 1 mg/kg) antagonized depression of the S wave in the electrocardiogram evoked by vasopressin. Single i.v. injection of MONL-03 caused a transient fall in the systolic blood pressure. This effect of MONL-03 was diminished by previous administration of heparin. These results suggest that MONL-03 has various pharmacological actions which are relatively weak on oral administration.

ACCESSION NUMBER: 1996:322370 BIOSIS DOCUMENT NUMBER: PREV199699044726

TITLE: General pharmacological properties of partially degraded

lactoferrin-derived peptide (MONL-03).

AUTHOR(S): Orikasa, Shuzo; Shimamura, Seiichi

CORPORATE SOURCE: Biochem. Res. Lab., Morinaga Milk Ind. Co. Ltd., 1-83

Higashihara 5-chome, Zama, Kanagawa 228, Japan

SOURCE: Oyo Yakuri, (1996) Vol. 51, No. 5, pp. 253-261.

CODEN: OYYAA2. ISSN: 0300-8533.

DOCUMENT TYPE: Article LANGUAGE: Japanese

ENTRY DATE: Entered STN: 11 Jul 1996

Last Updated on STN: 11 Jul 1996

L22 ANSWER 10 OF 51 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI CHARACTERIZATION OF THE BINDING OF FERRITIN TO THE RAT LIVER FERRITIN RECEPTOR.

The binding characteristics and specificity of the rat hepatic ferritin AB receptor was investigated using ferritins prepared from rat liver, heart, spleen, kidney and serum, human liver and serum, guinea pig liver and horse spleen as well as ferritins enriched with respect to either H- or L-type subunit composition, prepared by chromatofocusing of rat liver ferritin on Mono-P or by reverse-phase chromatography of ferritin subunits on ProRPC 5/10. No significant difference was apparent in the binding of any of the tissue ferritins, or of ferritins of predominantly acidic or basic subunit composition. However, serum ferritin bound with a lower afinity. The effect of carbohydrate on the ferritin-receptor binding was examined by glycosidase treatment of tissue and serum ferritins. Tissue ferritin binding was unaffected, while serum ferritin binding affinity was increased to that of the tissue ferritins. Inhibition of ferritin binding by lactoferrin was not due to common carbohydrate moieties as previously suggested but was due to direct binding of lactoferrin to ferritin. Therefore, carbohydrate residues do not appear to facilitate receptor-ferritin binding, and sialic acid residues present on serum ferritin may in fact interfere with binding. The results indicate that the hepatic ferritin receptor acts preferentially to remove tissue ferritins from the circulation. The lower binding affinity of serum ferritin for the ferritin receptor explains its slower in vivo clearance relative to tissue ferritins.

ACCESSION NUMBER: 1986:169936 BIOSIS

DOCUMENT NUMBER: PREV198681080352; BA81:80352

TITLE: CHARACTERIZATION OF THE BINDING OF FERRITIN TO THE RAT

LIVER FERRITIN RECEPTOR.

AUTHOR(S): MACK U [Reprint author]; STOREY E L; POWELL L W; HALLIDAY J

W

CORPORATE SOURCE: DEP MED, CLINICAL SCI BUILDING, ROYAL BRISBANE HOSP,

BRISBANE, QLD 4029, AUST

SOURCE: Biochimica et Biophysica Acta, (1985) Vol. 843, No. 3, pp.

164-170.

CODEN: BBACAQ. ISSN: 0006-3002.

DOCUMENT TYPE: Article

FILE SEGMENT: BA LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 26 Apr 1986

Last Updated on STN: 26 Apr 1986